

# 5<sup>TH</sup> BIENNIAL DEOMI EO/EEO RESEARCH SYMPOSIUM PROCEEDINGS



DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE

*February 17-18, 2005*

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>2005</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2005 to 00-00-2005</b>	
4. TITLE AND SUBTITLE <b>5TH Biennial DEOMI EO/EEO Research Symposium Proceedings</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Defense Equal Opportunity Management Institute DEOMI,366 Tuskegee Airmen Drive ,Patrick AFB,FL,32925-3399</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>Proceedings of the 5th Biennial EO/EEO Research Symposium, February 17-18, 2005 Patrick Air Force Base, Florida</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>185</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

# **Proceedings**

## **5<sup>th</sup> Biennial EO/EEO**

### **Research Symposium**

**February 17-18, 2005**

**Patrick Air Force Base, Florida**

**Sponsored by:**

**Defense Equal Opportunity Management Institute (DEOMI)**

**Research & Evaluation Committee**

**Directorate of Research**

**Patrick Air Force Base, Florida**



**Defense Equal Opportunity Management Institute**

366 Tuskegee Airmen Drive

Patrick AFB, FL 32925

**Proceedings**  
**5<sup>th</sup> Biennial Equal Opportunity/  
Equal Employment Opportunity  
Research Symposium**

**Commandant, Defense Equal Opportunity Management Institute**  
Robert D. Watts, CAPT, USN

**Symposium Chair/Chief Editor**  
Mr. Jerry Scarpate

**Assistant Editors**  
CPT Ian Midgley, USA  
LT Herbert Coard III, Ed.D, MSC, USN  
Ms. Rebecca Marcum  
Mr. Scott Chevalier, Ki, LLC

**Research and Evaluation Committee**  
LT Herbert Coard, Ed.D., MSC, USN; Capt Karen Gregory, USAF; LT  
Vanessa Givens, USN; SCPO Kurt Nance, USCG; Mr. James Lambright;  
Ms. Karen Olender; Ms. Rebecca Marcum; Mr. Jerry Scarpate;  
Mr. Samuel Cruz

The cover was produced by Mr. Peter Hemmer, Ki, LLC.

## Foreword

The Defense Equal Opportunity Management Institute's Biennial Equal Opportunity/Equal Employment Opportunity (EO/EEO) Research Symposium serves as a forum for researchers to share their investigations of EO/EEO issues with other researchers and military policy makers. This publication provides a culmination of the research presented at the 5<sup>th</sup> Biennial EO/EEO Research Symposium held February 17-18, 2005 at the Institute at Patrick Air Force Base, Florida.

The symposium consisted of three structured activities:

1. **Paper Sessions:** The presenters provided research papers which were submitted in response to the 2004 Call for Papers. Most topics were related to military EO/EEO and many of the researchers had a regular association with the Institute. Entire papers are included in this publication. The exception is "Is Iraq a Class War?" which is included as a Power Point presentation.
2. **Panel Session:** This session was designed to bring researchers together to discuss a common topic (Evaluating EO Initiatives). Abstracts are included in this publication.
3. **Poster Session:** This activity featured displayed presentations which allowed face-to-face conversation between the authors and viewers. The abstracts from these presentations are included in this publication.

A Power Point presentation by the Keynote speaker is also included in the Proceedings.

DEOMI does not endorse the views presented, nor does DEOMI bear responsibility for the contents of the presentations. In each case, **the views presented are those of the author(s) and do not necessarily reflect the official views of the Department of Defense or any of its agencies unless otherwise indicated.** Each author bears full responsibility for the content and accuracy of their work.

## Acknowledgments

The Institute would like to thank the following individuals who provided support for the Symposium: LT Herbert Coard III, Capt Karen Gregory, LT Vanessa Givens, SCPO Kurt Nance, MSG Pedro Corraliza, SFC Ian Dames, SSG Terrence Daniels, Mrs. Debra Eddy, Mrs. Kiyoko Dornan, Ms. Rebecca Marcum, Ms. Karen Olender, Mr. Sam Cruz, and Mr. Peter Hemmer

## **Table of Contents**

### **I. Guest Speaker**

<b>Featured Speaker: What America Can Learn from Military Race Relations</b>	<b>1</b>
--	----------

M. R. Dansby

### **II. Presentations**

<b>Updating the Bogardus Social Distance Studies: A New National Survey</b>	<b>9</b>
---	----------

Vincent Parrillo

<b>Evaluating the Effectiveness of Diversity: What the Military Can Learn From Business</b>	<b>26</b>
---	-----------

Stephen Knouse

<b>Equal Opportunity Training in the Military: Toward a Synthesis of Theory And Practice</b>	<b>39</b>
--	-----------

Dan Landis

<b>Mobilization and Diversity in the U.S. Armed Forces</b>	<b>54</b>
--	-----------

David Segal

<b>Propensity to Serve and Motivations to Enlist among White, Black, and Hispanic American Combat Soldiers</b>	<b>69</b>
--	-----------

Ryan Kelty

<b>Is Iraq a Class War?</b>	<b>81</b>
-----------------------------	-----------

Morten Ender

<b>Employment Equity and the Canadian Forces</b>	<b>88</b>
--	-----------

Major Robert Soucy & Chief Warrant Officer Kevin Junor

<b>Testing for Double Risk of Victimization: Race/Ethnicity and Sexual Harassment in the U.S. Military, 2002</b>	<b>101</b>
--	------------

Richard Harris

<b>Organizational Climate and Tolerance of Harassment Based on Sexual Orientation in the U.S. Military</b>	<b>123</b>
--	------------

Juanita Firestone

<b>Establishing the Prima Facie Case for Adverse Impact: Four-Fifths Rule Versus Statistical Significance Tests</b>	<b>142</b>
---	------------

Patrice Esson

<b>Reducing Adverse Impact when Using an Aptitude Test</b>	<b>151</b>
--	------------

Neil Hauenstein

<b>Comparing Computerized-Based and Paper-Pencil Versions of the DEOCS</b>	<b>161</b>
--	------------

Stephen Truhon

### **III. Panel: Evaluating EO Initiatives**

LT Herbert Coard III, Organizer/Presider

<b>How the U.S. Military Equal Opportunity Training Program Impacts Operational Readiness and Effectiveness: An Exploratory Study</b>	<b>168</b>
---	------------

James Camic

<b>EO Issues: EO Initiatives and Measuring Effectiveness</b>	<b>169</b>
--	------------

LT David McKay

### **IV. Posters**

<b>Diversity in the Workplace: Tolerance through Awareness</b>	<b>170</b>
--	------------

MUCS Steven Barzal

<b>Expressions and Perceptions – Examining Written Comments on the DEOMI Equal Opportunity Climate Survey (DEOCS)</b>	<b>171</b>
---	------------

Gene Murray

<b>How do ROTC Cadets Acquire and Recall Information Regarding Equal Opportunity Issues?</b>	<b>172</b>
--	------------

Gene Murray

<b>Fleet Perceptions of Sexual Assault and the Sexual Assault Victim Intervention (SAVI) Program in the U.S. Navy</b>	<b>173</b>
---	------------

Carol Newell

<b>Cultural and Gender Sensitivity in Navy and Marine Corps Personnel: Preliminary Analyses of Self Report Data from Two Ships</b>	<b>174</b>
--	------------

Fernando Garzon

<b>The Naval Officer Survey: Perceptions about Diversity, Mentoring, and Career Issues</b>	<b>175</b>
--	------------

Paul Rosenfeld



Slide 1



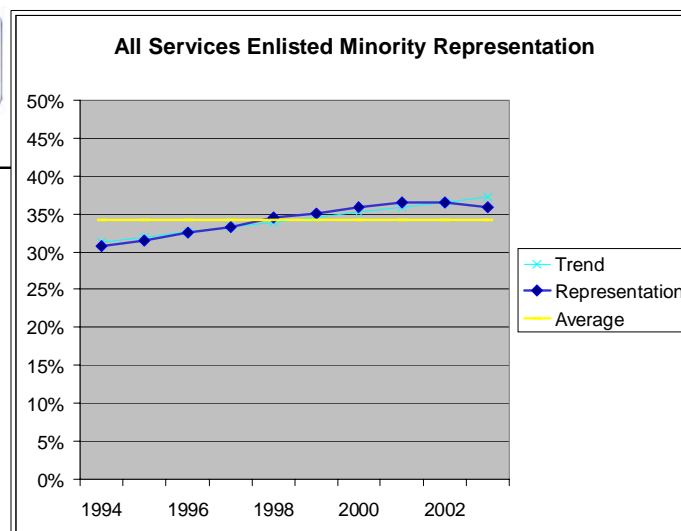
M.R. (Mickey) Dansby, Ph.D.,  
Organizational Consultant  
mickey@mickeydansby.com

## What America Can Learn from Military Race Relations

*"Helping prepare organizations for a new  
millennium..."*

©2005 M.R. Dansby, Ph.D.

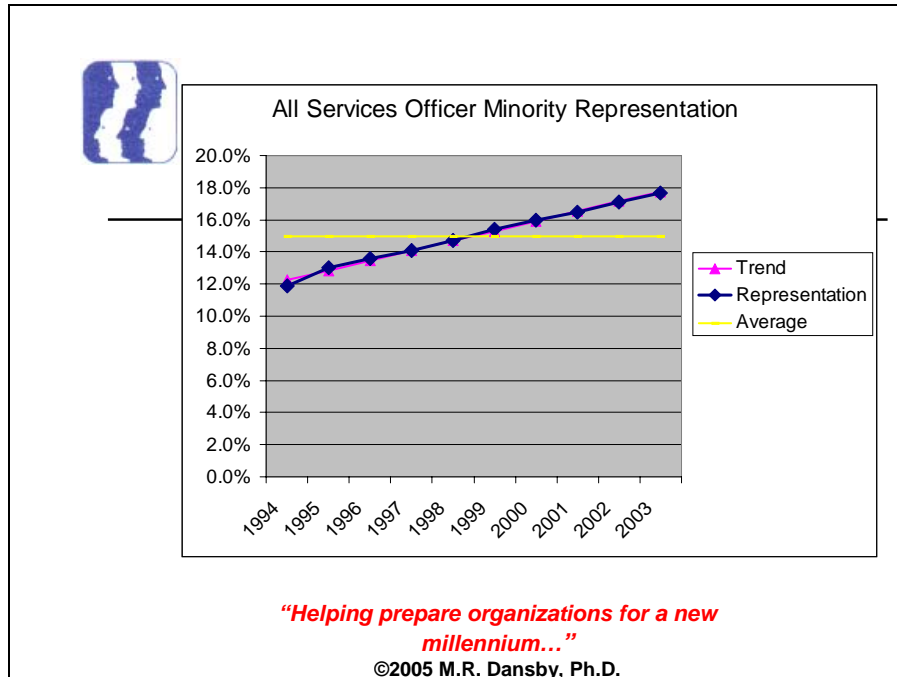
Slide 2



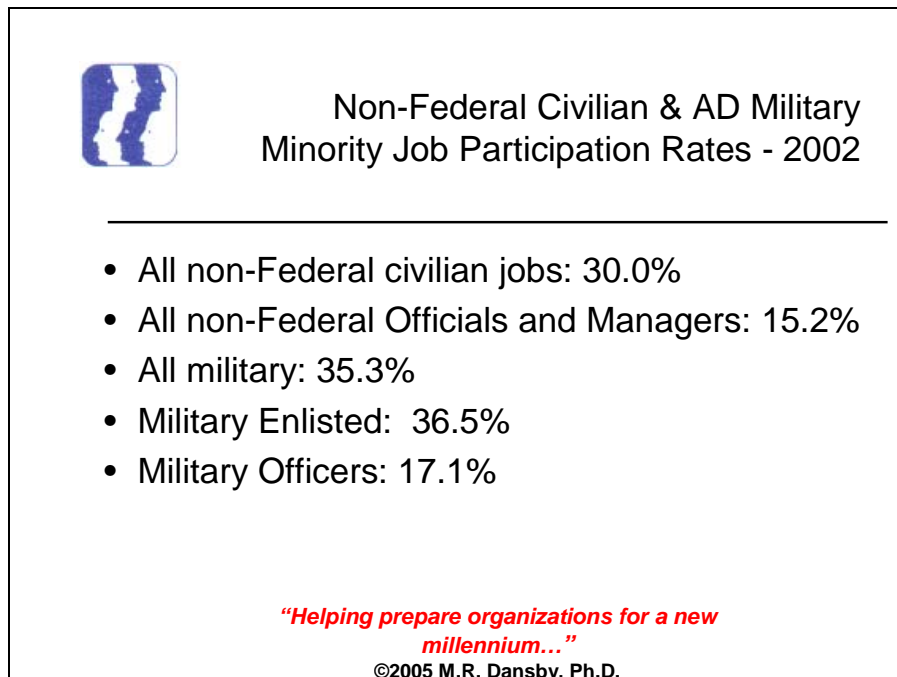
*"Helping prepare organizations for a new  
millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 3



Slide 4



Slide 5



## Overview

---

- Why not a more contemporary (trendier?) title?
- What has the military generally done better than civilian society?
- What are some research implications?

*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 6



## Why not a more contemporary title?


---

- Lack of a common understanding of what "diversity" means
- "Flavor of the month" mentality
- Really focusing on one MAJOR issue (Curly says find the ONE thing and go after it)

*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 7



## What has the military generally done better than civilian society?


---

- Top leadership involvement and accountability
- Acceptance of the “business case”
- Consistent commitment
- Education
- Cultural change through behavioral change and compliance
- Affirmative Action
- Minority recruiting
- Equitable promotion system and placement of minority individuals in high positions
- Research and data gathering
- Regular reporting & analysis

*“Helping prepare organizations for a new millennium...”*

©2005 M.R. Dansby, Ph.D.

Slide 8



## (1) What has the military generally done better than civilian society?

---

- Top leadership involvement and accountability
- Acceptance of the “business case”
- Consistent commitment

*“Helping prepare organizations for a new millennium...”*

©2005 M.R. Dansby, Ph.D.

Slide 9



(2) What has the military generally done better than civilian society?

---

- Education
- Cultural change through behavioral change and compliance

*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 10



(3) What has the military generally done better than civilian society?

---

- Affirmative Action
  - Common civilian Affirmative Action mistakes
  - How the military has been more effective
    - Identifying true requirements
    - Setting the bar at a reasonable level and maintaining requirements
    - Helping to raise skill levels to meet the true requirements

*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 11



(4) What has the military generally done better than civilian society?

---

- Minority recruiting
- Equitable promotion system and placement of minority individuals in high positions

*“Helping prepare organizations for a new millennium...”*

©2005 M.R. Dansby, Ph.D.

Slide 12



(5) What has the military generally done better than civilian society?

---

- Research and data gathering
- Regular reporting & analysis

*“Helping prepare organizations for a new millennium...”*

©2005 M.R. Dansby, Ph.D.

Slide 13



## What are some research implications?

---

- Documenting differences
- Confirming/disconfirming the hypotheses presented today
- Comparing minority perspectives from both military and civilian culture

*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 14



## Questions


---



*"Helping prepare organizations for a new millennium..."*

©2005 M.R. Dansby, Ph.D.

Slide 15



---

M. R. (Mickey) Dansby, Ph.D. 340 Kingston Road Satellite Beach, FL 32937	Home Office Phone/Fax: (321) 777-8346 Cell Phone: (321) 223-9563
mickey@mickeydansby.com	<a href="http://www.mickeydansby.com">http://www.mickeydansby.com</a>

***"Helping prepare organizations for a new millennium..."***  
©2005 M.R. Dansby, Ph.D.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**



## Updating the Bogardus Social Distance Studies: A New National Survey<sup>1</sup>

Vincent N. Parrillo  
William Paterson University

Christopher Donoghue  
William Paterson University

### Abstract

The last quarter of the twentieth century witnessed a number of events and social transformations that have had great implications for religious and ethnic relations around the world. This study seeks to gauge the changes in sentiment towards various U.S. ethnic and religious groups by updating the Bogardus social distance scale. The Bogardus study, which was designed to measure the level of acceptance that Americans feel towards members of the most common ethnic groups in the United States, was conducted five times between 1920 and 1977 with very few changes in research design. Consistent with prior replications, the authors of this study collected a random sample of 2,916 college students and administered the social distance scale in the form of a questionnaire. The findings indicate that the mean level of social distance towards all ethnic groups, as well as the spread between the groups with the highest and lowest levels of social distance, decreased since 1977. Mean comparisons and ANOVA testing also showed that gender, nation of origin, and race are all significant indicators of the level of social distance towards all groups.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

---

<sup>1</sup> This article is an expanded version of papers presented at the August, 2002 annual meeting of the American Sociological Association, Chicago, IL and the March 2002 annual meeting of the Eastern Sociological Society, Boston, MA. The authors would like to thank Dona Fountoukidis, Gurvinder Khaneja, and Claudia Geers for invaluable assistance in the questionnaire design and data posting, as well as James Mahon, Enrique Pumar, and the anonymous reviewers for their helpful comments.

## Updating the Bogardus Social Distance Studies: A New National Survey

Vincent N. Parrillo  
William Paterson University

Christopher Donoghue  
William Paterson University

When Emory Bogardus published *A History of Social Thought* in 1922, the use of social surveys and statistical analyses to describe social phenomena were in the early years of popular use by social scientists. With his focus on the “race problem” as one of the major issues confronting U.S. society, Bogardus incorporated these fledgling research techniques in his suggestion that we could gain insights through the analysis of a social survey on “racial” attitudes--conducted at regular intervals--to detect what changes, if any, occurred. As Bogardus (1922) enthusiastically stated, the combination of the social survey with appropriate statistical analysis could result in “a flood of light upon important phases of societal life.” (p.482). His seminal idea of social measurement in the field of race relations, augmented by the notion of longitudinal comparisons, was the genesis of a simple but effective research tool that became a widely used and highly influential instrument in the study of intergroup relations.

Seeking to measure the perceived “social distance” from 30 “racial” groups, Bogardus initiated his first nationwide survey of college students in 1926. Except for some minor fine-tuning of that first instrument, Bogardus utilized the same procedures in subsequent nationwide surveys in 1946, 1956, and 1966. (He was out of the country in 1936.) Following his death in 1973, Carolyn A. Owen, Howard C. Elsner, and Thomas R. McFaul replicated the Bogardus studies in 1977, using the same 30 racial and ethnic groups and selecting their respondents in a manner virtually identical to that of Bogardus.

Since 1977, no national study replicating the five studies from 1926 to 1977 has been done, until now. Perhaps a primary reason for this long interval is that demographic changes in U.S. society since 1977 so affected its diversity, that the original list of 30 groups became obsolete, making further comparisons useless. This study attempts to preserve the Bogardus legacy of social distance measurement yet meet the challenge presented by a far more diverse society. To do so, we deleted some groups--no longer visible minorities--to make room for newer groups both sizable in number and highly visible as minorities. Otherwise, we employed the same research instrument and methodology to replicate the earlier studies as closely as possible.

### **The Social Distance Scale Legacy**

In his last book, *A Forty-Year Social Distance Study* (1967), Bogardus looked back on his work, noting both his own accomplishments using the social distance scale and those of others. Although acknowledging that some questioned the underlying assumption of his or any other scale as a valid and reliable measurement index (Krech & Crutchfield, 1948; Sartain & Bell,

1949), Bogardus found satisfaction that the work of others reaffirmed his scale's reliability and validity (Newcomb, 1950; Hartley & Hartley, 1952; Sherif & Sherif, 1956).

And, as Brein and Ryback (1971) reported, many other scholars had utilized the social distance scale to measure a wide variety of social distance phenomena, including that between doctors and nurses in a mental hospital (Pearlin & Rosenberg, 1962), among college students when mental retardation is a factor (Dent, 1966), and among health professionals when patients were dying (Kalish, 1966). Since Brein and Ryback's article, other social distance studies further explored this dimension of intergroup relations. Yancey (1999), for example, determined that Whites attending interracial churches exhibit less social distance toward African Americans. Kleg and Yamamoto (1998), replicating the first Bogardus study, examined the views of 135 middle-school teachers. Raden (1998) explored the preferred social distance toward Jews by Blacks and Whites. Wilson (1996) studied White attitudes toward Asians, Blacks, and Hispanics. Walsh (1990) analyzed the relation between immigrants with lower social acceptance and naturalization rates.

A common finding among these studies was that individuals typically are more comfortable with others of perceived similarity and so maintain a closer social distance in interactions with them. Conversely, by evaluating their ingroup more favorably, they also tend to express a self-serving bias toward dissimilar outgroups (Parrillo, 2003; Mayhew, McPherson, & Rotolo, 1995).

Because the work begun by Bogardus inspired an extensive body of research, Owen et al. (1977) reported, "Bogardus' measure of social distance has been the launching point for myriad studies of social class, occupation, religion, sex, age, and race in many social contexts and in many different cultures both here and abroad." (p.82). In varying applications, the Bogardus social distance scale remains influential and extensively applied, vivid testimony from the academic community as to its merits.

We must be cautious, however, in our interpretation of what exactly such attitudinal evidence tells us. Since La Piere's classic study (1934), social scientists have continually called our attention to an oft-existing discrepancy between individuals' expressed attitudes and their actions (De Fries & Ford, 1969; Laing, 1969; Tarter, 1969; Warner & DeFleur, 1969; Wicker, 1969; Jackman, 1976; Perry, Gillespie, & Lotz, 1976; Frideres & Warner, 1980; Ungar, 1998). As Kleg and Yamamoto (1998) noted, we can assume that "social desirability factors" may well be at work "when applied to such a sensitive and emotionally charged matter as a person's ethno-racial attitudes." (p.187). In examining this new study, therefore, we must consider whether or not these attitudinal responses partly reflect the contemporary norm of "political correctness." This possibility raises important concerns about the validity of social distance measures. If respondents feel they are risking criticism or sanctions for their opinions about other groups, an artificial bias towards reduced social distance may be taking effect. Nevertheless, the assurances of anonymity and confidentiality are likely to counteract this effect to some degree.

### **Results of Previous National Studies**

In all five past national studies, the respondents were students in U.S. colleges and universities. The actual number of participants was 1,725 in 1926; 1,950 in 1946; 2,053 in 1956;

2,605 in 1966; and 1,488 in 1977. Mostly undergraduate students in all majors, they were enrolled in social science classes (primarily in sociology), but not in ethnic studies or race relations courses. In each of his four studies, Bogardus garnered a 10 percent Black respondent rate, primarily from southern schools; virtually all other respondents were Whites. Owen et al. (1977) had four southern schools in their 12-school sample, with 19 percent Black respondents and two percent Asian respondents. Instructions in all studies asked the students to reply to the scale items in a rapid manner, assuring them of their anonymity in the data analysis.

Social distance scores ranged from 1 to 7 along a choice continuum (marriage, close friend, neighbor, co-worker, speaking acquaintance, visitor to my country, and far from my country). The lower the score, the greater the degree of intimacy a respondent would grant to members of a particular racial or ethnic group. Generally, in all previous studies non-ethnic U.S. Whites and northern and western Europeans dominated the top third, with racial minorities in the bottom third, and a mixture of groups in the middle. Notably, Italians and American Indians moved upward significantly in the last two studies, placing in the top third. “Negroes” (the term was still generally acceptable in 1977) also showed marked improvement in social acceptance, rising from next to last in 1966 to about mid-range in 1977.

The five studies allowed for two other measurement comparisons. First was the overall mean of the sum total of all participants’ responses to the 30 groups overall. Second was the calculated social distance spread, or difference in mean scores between the groups receiving the highest and lowest scores. Table 1 presents both sets of these data, revealing a steady decline in both, with the mean for social distance responses gradually lowering from 2.14 to 1.93, and the social distance spread dropping even more dramatically from 2.85 to 1.37.

**Table 1**

**Overall Mean Social Distance Score and Spread by Year**

<b>Year</b>	<b>Overall Mean</b>	<b>Spread</b>
1926	2.14	2.85
1946	2.12	2.57
1956	2.08	1.75
1966	1.92	1.56
1977	1.93	1.37
2001	1.45	.87

Bogardus (1967) noted that this growing social acceptance of various groups would have been even greater, given immigration restrictions over this period, had it not been for the mitigating influence of such external events as the Great Depression, World War II, the Korean War, and the Cold War. (p. 37-39). He was optimistic about the future, convinced that the decline in social distance among groups would continue, but at a slower rate. However, he also conceded that the greater social distances toward some groups resulted from deep-rooted collective feelings, which might not change easily or quickly.

Better communication, amelioration of conditions fostering negative attitudes toward other groups, and long-term education programs were his solutions to reduce the remaining

social distance among groups. Bogardus based his hopeful outlook on the belief that a positive cycle of improving attitudes toward other groups would feed on increased knowledge about outgroup members and positive intergroup experiences together leading to a resocialization of feelings toward others.

Indeed, Owen et al. (1977) found evidence of a further decline in social distance in their study and concluded that their results “do support the half-century trend toward decreasing social distance with respect to many of the 30 ethnic groups studied” (p.95). However, because their study had a disproportionately higher ratio of Blacks (19 percent) than in the Bogardus studies, they suggested that the “reluctance of Blacks to give Americans (U.S. Whites) a close social distance score” (a pattern also found by Bogardus) led to the Americans’ higher score of 1.25, compared to previous scores for Americans (1.10 in 1926, 1.04 in 1946, 1.08 in 1956, and 1.07 in 1966). The authors thus concluded that the actual spread would have declined more substantially had their proportion of Black respondents been more comparable to those in the four Bogardus studies.

Given the passage of a quarter century since the last national study, several important questions arise. If a disproportionate percentage of Black respondents increased the social distance score for Americans in 1977, what results would now occur from a student population sample far more racially and ethnically diverse than in previous studies, including a sizable proportion born in another country? With the addition of newer minority groups, less fully assimilated, to replace other, mostly assimilated groups, would Americans express greater social distance towards those new groups, and would those feelings be reciprocated? How would African and Native Americans fare in comparison to other, more recently arrived, racial groups? Would the changed list and more diverse student sample (reflecting increased diversity in the larger society) adversely affect the predictions Bogardus made about continually shrinking social distances?

Based on past national findings, the authors expected to find that: (1) both overall mean score and social distance spread would further decline, despite the increased societal diversity; (2) groups more dissimilar from the mainstream (culture, race) would be more likely to place in the lower tier; (3) race would be an important variable in social distance scores; (4) place of birth would affect social distance results; and (5) females would display a higher level of social acceptance for others than males.

### **Methodology**

The colleges and universities were selected at random from an alphabetical listing of four-year higher education institutions, stratified by the four major regions of the United States (East, South, Midwest, and West). To further ensure a representative sample, the number of surveys to be completed at each institution was prorated according to its total enrollment. Six schools were chosen from the East, six from the South, and five schools each from the Midwest and West, for a total of 22 schools. This fairly even distribution over the four regions thus makes this study comparable to previous studies in geographic sampling.

A total of 2,916 students enrolled in the 22 colleges and universities throughout the United States participated in this study, conducted from late September through October 2001.

Another 154 completed surveys were eliminated because they had been administered prior to the terrorist attacks on September 11, 2001, and the radically changed world thereafter rendered those responses incompatible (invalid) with all other responses. The horror of September 11, 2001 (9/11) and the timing of the survey led the authors to a new expectation: 9/11 would have a negative impact on the survey results for Arabs and Muslims.

As with previous studies, the respondents were enrolled in social science (primarily sociology) courses, and no questionnaires were distributed to students in classes on minority groups or race relations. Under specific guidelines set by each institution's Institutional Research Board (IRB) for human subjects research, respondents were assured of anonymity in their answers.

To update the Bogardus survey instrument, seven groups were removed because they were either mostly assimilated and/or far less visible minority groups than others. These were the Armenians, Czechs, Finns, Norwegians, Scots, Swedish, and Turks. In addition, Japanese Americans and Mexican Americans were deleted, while keeping Japanese and Mexicans in the list. This change allowed for greater consistency in the designation of all groups. Added to the list, because of their numbers and high visibility, were Africans, Arabs, Cubans, Dominicans, Haitians, Jamaicans, Muslims<sup>2</sup>, Puerto Ricans, and Vietnamese, for a total of nine new groups. Otherwise, the survey instrument remained the same in structure and usage. Respondents were asked to "mark as many columns as you find appropriate to accurately reflect your feelings toward each of these individual groups," and to choose as many of the seven categories as they found appropriate. As in previous studies, a respondent's left-most answer (the closest degree of social distance) was scored to represent that individual's social distance for each particular group.

### **Respondents**

The racial breakdown of respondents was fairly close to national totals. Caucasians comprised 70% of the sample, followed by Blacks at 10.1%, and Asians at 6.4%. Another 6.5% reported a different race, and the remainder of the sample reported either no race or more than one race. Hispanics accounted for 8.6% of all respondents. Catholics and Protestants constituted 60.9% of all respondents, but the 38% Catholic participation was higher than the national proportion of about 28%. The remainder were Jewish (5.1%), Muslim (1.2%), or other (30.7%). The latter category was mostly "no religion," as well as a small number of other faiths such as Hindu and Buddhist. In the 1977 study, respondents were 37% Protestant, 37% Catholic, 5% Jewish, and 21% "other" religious preference.

Females, at 62%, were a higher proportion than the typical college population or national norm, but only slightly higher than in past national studies. For example, the 1977 study had a 58% female participation, while the participants in the first Bogardus study were two-thirds female. Participants' home backgrounds and educational levels approximated normal expectations. The majority lived in suburbs, while nearly one fourth came from urban areas and about one seventh from rural areas. About 46% were first-year undergraduates in all majors

---

<sup>2</sup> Our inclusion of "Muslims" as a distinct category paralleled earlier studies' inclusion of "Jews," in essence to measure acceptance of a large, visible religious minority that some perceive as "different."

taking an introductory social science course, with a descending proportion thereafter as the level of education increased.

Nearly 12% of respondents were born outside the United States, approximating that found in the 2000 Census of the total U.S. population. Asked if one or both parents were born outside the United States, nearly 23% responded in the affirmative.

In summary, except for the high proportion of Catholic respondents and of female respondents (as in earlier studies), this sample population cohort is quite representative. The proportions of racial and ethnic groups, native-born and foreign-born, geographic distribution and residential patterning all approximate the actual U.S. college population.

### Findings

Although this analysis is not directly comparable with the five previous national studies because of changes in the list of groups, some comparisons are still possible in terms of mean scores, social distance spread, and general rankings. Previous studies employed only descriptive statistics, and this study utilizes them also to allow for those comparisons. In addition, results of t-tests and an Analysis of Variance (ANOVA) are used to illustrate the relative effects of gender, nation of origin, ethnicity and race on the level of social distance.

#### Descriptive Statistics

With a larger sample size than for the previous studies, the total responses were thus also larger, reaching 126,053. The new list of 30 groups received an overall mean social distance score of 1.45, with a spread of 0.87. Thus, despite the removal of more assimilated groups and the addition of less assimilated groups to the list, the downward trend in both social distance indicators continued, revealing greater social acceptance than the 1977 replication. These summary findings would seem to suggest that Americans are becoming more comfortable with a greater number of ethnic groups, yet it may also be arising due to other factors such as the contemporary trend towards political correctness or the increased level of diversity on college campuses. Table 2 lists those groups ranked low to high in terms of their social distance scores. The exact placement of a group in relation to another near it should not be given too much importance, due both to the close proximity of social distance scores and the possibility of sampling variability.

**Table 2**

#### **Social Distance Rankings in 2001 (N=2,916)**

<b>Rank</b>	<b>Group</b>	<b>Score</b>	<b>Rank</b>	<b>Group</b>	<b>Score</b>	<b>Rank</b>	<b>Group</b>	<b>Score</b>
1.	Americans	1.07	11.	Jews	1.38	21.	Dominicans	1.51
2.	Italians	1.15	12.	Indians (American)	1.40	22.	Japanese	1.52
3.	Canadians	1.20	13.	Africans	1.43	23.	Cubans	1.53
4.	British	1.23	14.	Polish	1.45	24.	Koreans	1.54
5.	Irish	1.23	15.	Other Hispanics/Latinos	1.45	25.	Mexicans	1.55
6.	French	1.28	16.	Filipinos	1.46	26.	Indians (India)	1.60

7. Greeks	1.33	17. Chinese	1.47	27. Haitians	1.63
8. Germans	1.33	18. Puerto Ricans	1.47	28. Vietnamese	1.69
9. African Americans	1.33	19. Jamaicans	1.49	29. Muslims	1.88
10. Dutch	1.35	20. Russians	1.50	30. Arabs	1.94

As expected, non-ethnic Whites remained in the most accepted, top position, with other top ten slots filled by Canadians and various European groups, essentially continuing a 70-year pattern. What is particularly striking about the new listing, however, is the dramatic rise of African Americans into the top sector. At first blush, this would appear to contradict opposite findings in such classic studies as Massey and Denton (1989, 1994) on residential segregation and Hacker (1995) on our racially divided society. However, a more consistent finding, as explained shortly, emerged after further analysis.

Three new groups to the list—Africans, Puerto Ricans, and Jamaicans—made a reasonably strong debut in the middle sector. Most Hispanic groups—including Cubans, Dominicans, Mexicans, Puerto Ricans, and Other Hispanics/Latinos—all received about the same score, suggesting a general consensus about this ethnic group. Most, but not all, Asian groups clustered together in the third sector. However, the mean scores for Japanese, Koreans, Mexicans, and Asian Indians were all lower than in previous studies, as respondents in 2001 collectively expressed a higher level of social acceptance than previous respondents.

Without question, the administration of this survey so soon after 9/11 produced results tempered by the tragic events of that day. Arabs, for example, received the highest number of “bar from entering my country” responses, a total of 112 (3.8%). At the same time, Arabs also received one of the lowest responses (52%) from the total sample for marrying into one’s family, while Muslims scored 49% for this category. With a greater social distance score than that given other groups, Arabs ranked last among the 30 groups. Yet when these scores were compared against the 154 pre-9/11 responses not included in these findings, no one selected the response “bar from my country.” Furthermore, Arabs reaped a 75% response for marrying into one’s family, with Muslims collecting a 68% similar response in the responses gathered prior to 9/11. Such a contrast in scores, even in this limited sample, suggests events may well have affected responses in the post-9/11 survey.

Even so, Arabs’ overall mean score in the 2001 national study was 1.94, lower than the mean scores for 18 groups in the 1977 study. Muslims fared slightly better, with a mean score of 1.88. This is a significant finding. Despite the impact of such a traumatic external factor as 9/11, respondents generally declared a closer social distance willingness for Muslims and Arabs than respondents in 1977 did for nearly half of their choices (an assortment of European, Hispanic, and Asian groups).

### Results of T-Tests and ANOVA

Means comparison for gender, place of birth, ethnicity, and race give some insight into the importance of these variables. Consistent with findings in previous national studies, females were more tolerant than males in nearly all 30 groups. Their tolerance was significantly greater for Cubans, Dominicans, Muslims, and Vietnamese ( $p < .05$ ), and more so for Canadians and Indians ( $p < .01$ ). Females were even more significantly tolerant than males towards Arabs



( $p < .001$ ). Moreover, the 1.43 total mean score by females, compared to the 1.48 total mean score by males, was also significant ( $p < .05$ ).

Foreign-born status also proved to be a significant variable. U.S. born respondents reported greater social distance than foreign-born respondents for all 30 groups. Foreign-born respondents were found to have significantly higher tolerance for African Americans, Canadians, Filipinos, Jamaicans, Jews and Russians ( $p < .05$ ), and more so for the Dutch, French, Germans, Greeks and Polish ( $p < .01$ ). They were even more significantly tolerant than U.S. born respondents for Americans, American Indians, Irish, and Italian ( $p < .001$ ). The mean social distance scores for all groups was also significantly higher for native-born respondents (1.44) than for foreign-born respondents (1.53,  $p < .01$ ).

Being Hispanic was another highly important factor in determining social distance. Not surprisingly, Hispanics displayed greater affinity for other Latinos, usually at the expense of white ethnics. The closer scores that Hispanics gave to Cubans, Dominicans, Mexicans, Puerto Ricans and other Hispanics/Latinos were all very significant ( $p < .001$ ). Also significant were the greater social distances that Hispanic respondents reported for Germans and Jews ( $p < .05$ ), and the Irish ( $p < .001$ ). While the differing scores among these individual groups were significant, the differences in overall mean scores between Hispanics (1.44) and non-Hispanics (1.45) was not statistically significant. The fairly similar social distance scores that Hispanics (who can be of any race) and non-Hispanics gave to African Americans and Africans help buttress the finding of improved race relations as measured by the fairly high rankings for African Americans and Africans in Table 2. That is, among a group of greater racial diversity (Hispanics), no significant difference in social acceptance of Blacks existed in comparison to non-Hispanics.

**Table 3**

**Independent-Sample t-Tests for the Effect of Gender, Foreign Born and Ethnicity  
On Social Distance**

Group	Gender		Foreign Born		Hispanic Origin	
	Mean Difference (Males-Females)	t-values	Mean Difference (U.S. Born-Foreign Born)	t-values	Mean Difference (Hispanic-Non-Hispanic)	t-values
<b>African</b>	0.051	1.877	0.0563	1.442	-0.005	-0.111
<b>African-American</b>	0.026	1.154	0.0875	2.387*	-0.018	-0.502
<b>American</b>	0.007	0.573	0.0826	3.611***	0.017	0.783
<b>Arab</b>	0.199	3.326***	0.0454	0.550	-0.143	-1.633
<b>British</b>	0.015	0.590	0.0580	1.774	0.063	1.443
<b>Canada</b>	0.067	2.566**	0.0732	2.428*	0.061	1.669
<b>Chinese</b>	0.053	1.700	0.0174	0.414	0.045	0.897
<b>Cuban</b>	0.093	2.328*	0.0376	0.675	-0.263	-5.556***
<b>Dominican</b>	0.077	2.146*	0.0616	1.161	-0.193	-4.073***
<b>Dutch</b>	0.024	0.798	0.1365	2.974**	0.105	1.883
<b>Filipino</b>	0.046	1.404	0.0939	1.985*	-0.046	-0.993
<b>French</b>	0.032	1.162	0.1182	2.965**	0.090	1.777
<b>German</b>	0.016	0.551	0.1383	3.165**	0.135	2.490*

<b>Greek</b>	0.043	1.512	0.1395	3.242**	0.053	1.098
<b>Haitian</b>	0.072	1.750	0.0712	1.283	-0.056	-0.927
<b>Indian</b>	0.100	2.574**	0.0885	1.581	0.024	0.420
<b>Indian(American)</b>	0.032	1.100	0.1968	4.211***	0.052	0.973
<b>Irish</b>	0	0.001	0.1955	4.864***	0.202	3.828***
<b>Italian</b>	0.012	0.746	0.1090	3.733***	-0.044	-1.818
<b>Jamaica</b>	0.063	1.937	0.1258	2.468*	0.014	0.272
<b>Japanese</b>	0.017	0.521	0.0764	1.546	0.060	1.065
<b>Jews</b>	0.014	0.507	0.1105	2.520*	0.136	2.490*
<b>Korean</b>	0.069	1.911	0.0701	1.359	0.094	1.601
<b>Mexican</b>	0.044	1.119	0.0361	0.707	-0.272	-5.873***
<b>Muslim</b>	0.107	2.081*	0.0644	0.874	-0.017	-0.205
<b>Other Hispanic, Latino</b>	0.041	1.175	0.0222	0.487	-0.369	12.935***
<b>Polish</b>	-0.007	-0.199	0.1279	2.627**	0.102	1.802
<b>Puerto-Rican</b>	0.047	1.348	0.0614	1.252	-0.237	-6.095***
<b>Russian</b>	-0.057	-1.675	0.1292	2.525*	0.073	1.225
<b>Vietnam</b>	0.097	2.331*	0.0658	1.159	0.072	1.058
<b>All Groups</b>	0.047	2.070*	0.0893	2.691**	-0.009	-0.243

\* $p < .05$ \*\* $p < .01$ \*\*\* $p < .001$ 

As expected, race played an important role in this study, especially since marrying into one's family was the closest measurement of social distance. Members of a particular racial group were more likely to choose the same race groups for marriage than other racial groups. Although interracial marriages are more common than in previous years (U.S. Bureau of the Census, 2001, p. 47), they are by no means commonplace. Using a simplified definition of race (White, Black or Other)<sup>3</sup>, one-way ANOVA tests showed that Blacks tended to express significantly greater social distance scores than Whites or "Others", towards Europeans and Asians (see Table 4). Post-Hoc tests (not shown), using the more conservative Tamhane's T2, which does not assume equal variances, found that Blacks were significantly less tolerant than Whites towards Americans, British, Canadians, Chinese, Dutch, French, Germans, Greeks, Irish, Italians, Japanese, Jews, Koreans, Polish, and Russians ( $p < .05$ ). They were also found to be significantly less tolerant than "Others" for all of the same groups except Americans.

**Table 4****One-Way ANOVA Results for the Effect of Race On Social Distance**

<b>Group</b>	<b>Means</b>			<b>F</b>
	<b>Whites</b>	<b>Blacks</b>	<b>Other</b>	
<b>African</b>	1.4358	1.2329	1.5172	16.035***
<b>African-American</b>	1.3477	1.0993	1.3943	26.974***
<b>American</b>	1.0461	1.1058	1.1460	25.301***
<b>Arab</b>	1.9792	1.9271	1.7866	3.398**
<b>British</b>	1.1575	1.5876	1.3293	69.122***
<b>Canada</b>	1.1423	1.4674	1.2688	41.71***

<sup>3</sup> The category of "other" included Asians, Hawaiian Pacific Islanders, American Indians and those that reported a different racial category. Respondents who reported no race or multiple races were excluded from this test.

<b>Chinese</b>	1.4652	1.6587	1.3286	16.985***
<b>Cuban</b>	1.5558	1.5189	1.4350	3.082*
<b>Dominican</b>	1.5246	1.4399	1.4706	1.643
<b>Dutch</b>	1.2737	1.6783	1.4381	43.703***
<b>Filipino</b>	1.4684	1.5137	1.3753	3.395*
<b>French</b>	1.2256	1.5294	1.3529	28.689***
<b>German</b>	1.2501	1.6990	1.4472	56.445***
<b>Greek</b>	1.2592	1.6735	1.4016	48.056***
<b>Haitian</b>	1.6424	1.5651	1.5882	1.103
<b>Indian</b>	1.6026	1.6263	1.5397	1.054
<b>Indian(American)</b>	1.4020	1.3517	1.4196	0.824
<b>Irish</b>	1.1384	1.6117	1.3935	110.324***
<b>Italian</b>	1.0980	1.3527	1.2353	58.372***
<b>Jamaica</b>	1.5000	1.3390	1.5275	5.625**
<b>Japanese</b>	1.5101	1.6564	1.4858	4.439*
<b>Jews</b>	1.3114	1.6747	1.5051	42.779***
<b>Korean</b>	1.5238	1.6838	1.4766	5.355**
<b>Mexican</b>	1.5761	1.5445	1.4857	1.670
<b>Muslim</b>	1.9112	1.7474	1.7873	3.408*
<b>Other Hispanic, Latino</b>	1.4897	1.3630	1.3740	5.352**
<b>Polish</b>	1.3766	1.8069	1.5234	36.812***
<b>Puerto-Rican</b>	1.5010	1.3093	1.4178	7.089***
<b>Russian</b>	1.4418	1.8616	1.5542	30.145***
<b>Vietnam</b>	1.6890	1.8028	1.5694	5.091**
<b>All Groups</b>	1.4295	1.5497	1.4535	5.696**

\* $p < .05$ \*\* $p < .01$ \*\*\* $p < .001$ 

In addition, Whites were found to be significantly closer than “Others” to Europeans, but significantly less tolerant of Asians. This was evidenced by the significantly closer scores for Whites than Others for Americans, British, Canadians, Dutch, French, German, Greek, Irish, Italian, Jews, Polish and Russians ( $p < .05$ ), but the significantly less tolerant scores for Chinese, Filipinos, Japanese, Koreans and Vietnamese. This latter finding, however, was likely influenced by the fact that the category of “Others” included mostly Asian respondents. Towards Hispanic groups, Blacks expressed significantly more tolerance than Whites for Jamaicans, Puerto Ricans, and other Hispanics/Latinos ( $p < .05$ ). Blacks also reported more tolerance than Whites for Cubans, Dominicans, Haitians, or Mexicans, but the differences were not significant. Virtually no significant differences were found to exist between Blacks and “Others” for those same Hispanic groups. T-tests for equality of means without assuming equal variances, found that on the whole, race proved to be a significant indicator of social distance for 25 of 30 groups ( $p < .05$ ). This variation of the ANOVA test for equality of means is also considered to be more conservative.

## Discussion

The findings are encouraging in many ways. As anticipated, gender, and place of birth all affected a group’s social acceptance. The greater tolerance by females over males echoed other studies (Carter, 1990; Qualls, Cox, & Schehr, 1992; Mills, Magrath, Sobkoviak, Stupac, & Welsh, 1995; Johnson & Marini, 1998). However, the spread in social distance--despite (a)

increased diversity in society, (b) a revised list reflecting that demographic reality, and (c) increased diversity among respondents--continued to shrink. The overall mean score of 1.45 was substantially lower than the 1.92 and 1.93 overall mean scores in 1966 and 1977 (see Table 1). These results may suggest a growing level of acceptance by a more diverse society of different others, even though many are recent arrivals, racial minorities, and/or from nonwestern lands. As stated earlier though, that growing acceptance might also be due to the legacy of political correctness and multicultural education initiatives designed to promote tolerance of others (Parrillo, 2003:pp.583-585). With 96 percent of respondents under age 30 and 46 percent first-year undergraduates (proportions comparable to past national studies), most of those expressing these attitudes were young adults who were inundated with such initiatives in the elementary and secondary grades. Interestingly though, there were no significant differences in their responses compared to those who were over 30 years of age.

In some ways, little changed in the pattern of responses. U.S. Whites remained top-ranked, with the various European groups continuing to occupy most of the upper ranks, while a variety of racial minorities, especially Asians, continued to rank near the bottom. Significantly, however, African Americans broke the racial barrier in entering the top sector and placing ahead of other White ethnic groups. What explains this finding? The race of respondents was a contributing variable, but not the key one, since Black respondents this time were a smaller proportion than in 1977 (11.4 percent to 19 percent). In the new study, Whites gave African Americans a much better social distance score (1.34 to 2.02). Why? One possible factor may be that more African Americans than ever before are identified as middle class (Frazier, 1957; Landry, 1987), offering perhaps an answer to the debate of race (Willie, 1979; Clark, 1980; Feagin, 1991) versus class (Wilson, 1978, 1987; Sowell, 1981). Does this finding possibly indicate that a growing Black middle class has resulted in greater social acceptance, despite racial differences, as upward mobility earlier did for previously disparaged White ethnic groups? Or do these responses reflect something more parochial, that of students revealing calm acceptance of racial others as they mostly do on their more diverse campuses? Or is the explanation found even elsewhere, such as in the traumatized post-9/11 feelings among the U.S. populace?

Whatever the reason to explain improved social distance scores for Blacks, race remains a significant factor in determining the degree of closeness in an individual's attitude toward other racial groups, especially when it comes to racial intermarriage. The racial barriers may have lowered, but they have not disappeared. And, as the statistically significant, negative Black responses to various White ethnic groups show, ethnicity is also an important component as well. The generally more tolerant scores of Blacks over Whites toward Hispanics is intriguing and merits further study. Race may have been a factor in these responses, since Hispanics can be of any race. However, other factors such as economics or immigration attitudes of respondents could also have affected the differing scores.

Of course, external events do influence attitudes. Previous social distance studies revealed how World War II affected responses about Japanese in 1946 and the Cold War affected responses about Russians in 1966 and 1977. The ranking of Muslims and Arabs in the last two places is hardly surprising as a repercussion of the terrorist attacks, but how do we explain their comparatively low social distance nonetheless?

In the aftermath of the terrorist attacks, Americans coalesced around the suddenly popular motto, “United We Stand” and acted accordingly. Reminded of the diversity among the thousands of victims, motivated by civic leaders calling for tolerance, and inspired by patriotism against terrorist enemies, Americans displayed greater acceptance of others unlike themselves (Frye, 2001; Harden, 2001; Hill, 2001). Since this study was undertaken in the seven weeks following 9/11, it is quite possible that this mindset affected the results, generating more positive responses than might otherwise have occurred had everyone’s world not changed so dramatically after the survey was conducted.

Perhaps this study thus bears witness to a “unity syndrome,” the coalescing of various groups against a common enemy who attacked our country. Only time will tell how lasting this new spirit is, both in the bottom rankings of Muslims and Arabs, and in the low social distance scores for all groups. Yet even if the unity syndrome lessens in its power, this study illustrates that greater acceptance of diversity is not only possible, but achievable. Finally, this study only captures social acceptance of groups at a given moment in time, a time immediately after the first successful attack on U.S. mainland soil. It is neither conclusive nor necessarily indicative of new patterns. Future replications of this social distance study will hopefully give a clearer picture of how tolerant Americans remain in their ever-growing multi-racial, multi-cultural society.

## REFERENCES

- Bogardus, E. S. (1922). *A History of Social Thought*. Los Angeles: University of Southern California Press.
- Bogardus, E. S. (1925). Social Distance and its Origins. *Sociology and Social Research*, 9, 216-225.
- Bogardus, E. S. (1933). A Social Distance Scale. *Sociology and Social Research*, 22, 265-271.
- Bogardus, E. S. (1947). Changes in Racial Distance. *International Journal of Attitude and Opinion Research*, 1, 55-62.
- Bogardus, E. S. (1958). Racial Distance Changes in the United States During the Past Thirty Years. *Sociology and Social Research*, 43, 127-135.
- Bogardus, E. S. (1967). *A Forty-Year Racial Distance Study*. Los Angeles: University of Southern California Press.
- Bogardus, E. S. (1968). Comparing Racial Distance in Ethiopia, South Africa, and the United States. *Sociology and Social Research*, 52, 149-156.
- Brein, M., & Ryback, D. (1971). Stimulus, Responses, and Response Characteristics of Social Distance and Self-Disclosure. *Sociology and Social Research*, 55, 17-28.
- Carter, R. T. (1990). The Relationship Between Racism and Racial Identity Among White Americans: An Exploratory Investigation. *Journal of Counseling and Development*, 69, 46-50.
- Clark, K. B. (1980, October 5). The Role of Race. *New York Times Magazine*.
- De Friese, G. H., & Ford, W. S. (1969). Verbal Attitudes, Overt Acts, and the Influence of Social Constraint in Interracial Behavior. *Social Problems*, 16, 493-504.
- Dent, Harold. (1966). An Investigation of the Influence of Mental Retardation on College Students of Social Distance. *Dissertation Abstracts International*, 28, 107.
- Feagin, J. R. (1991). The Continuing Significance of Race: Antiblack Discrimination in Public Places. *American Sociological Review*, 56, 101-116.
- Frazier, E. F. (1957). *The Black Bourgeoisie: The Rise of a New Middle Class in the United States*. New York: Free Press.
- Frideres, J. S., & Warner, Lyle G. (1980). Attitude-Action Relationships. *Canadian Review of Sociology and Anthropology*, 17, 109-121.
- Frye, W. (2001, September 29). Don't Let Ethnic Hatred Divide Us. *The Baltimore Sun*, p. 15A.

- Hacker, A. (1995). *Two Nations: Black and White, Separate, Hostile, Unequal*. New York: Ballantine Books.
- Harden, B. (2001, September 20). Arab Americans Are Finding New Tolerance Amid the Turmoil. *The New York Times*, p. B1.
- Hartley, E., & Hartley, R. (1952). *Fundamentals of Social Psychology*. New York: Alfred A. Knopf.
- Hill, J. (2001, October 14). A Tone of Tolerance and Little Fear. *The Tampa Tribune*, p. 1.
- Jackman, M. R. (1976). The Relation Between Verbal Attitude and Overt Behavior: A Public Opinion Application. *Social Force*, 54, 646-668.
- Johnson, M. K., & Marini, M. M. (1998). Bridging the Racial Divide in the United States: The Effect of Gender. *Social Psychology Quarterly*, 61, 247-258.
- Kalish, R. A. (1966). Social Distance and Dying. *Community Mental Health Journal*, 2, 152-155.
- Kleg, M., & Yamamoto, K. (1998). As the World Turns: Ethno-Racial Distances After 70 Years. *Social Science Journal*, 35, 183-190.
- Krech, D., & Crutchfield, R. S. (1947). *Theory and Problems of Social Psychology*. New York: McGraw-Hill.
- Landry, B. (1987). *The New Black Middle Class*. Berkeley, CA: University of California Press.
- Laing, J. E. (1969). Pitfalls in Predicting Behavior from Survey Responses. *Philippine Sociological Review*, 17, 154-163.
- La Piere, R. T. (1934). Attitudes vs. Actions. *Social Forces*, 13, 230-237.
- Massey, D. S., & Denton, N. A. (1989). Hypersegregation in U.S. Metropolitan Areas: Black and Hispanic Segregation Along Five Dimensions. *Demography*, 26, 373-391.
- Massey, D. S., & Denton, N. A. (1994). *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, MA: Harvard University Press.
- Mayhew, B., McPherson, J., & Rotolo, T. (1995). Sex and Race Homogeneity in Naturally Occurring Groups. *Social Forces*, 74, 15-52.
- Mills, J. K., Magrath, D., Sobkowiak, P., Stupiec, S., & Welsh, S. (1995). Differences in Expressed Racial Prejudice and Acceptance of Others. *Journal of Psychology*, 129, 357-359.
- Newcomb, T. (1950). *Social Psychology*. New York: The Dryden Press.

- Owen, C. A., Elsner, H. C., & McFaul, T. R. (1977). A Half-Century of Social Distance Research: National Replication of the Bogardus' Studies. *Sociology and Social Research*, 66, 80-98.
- Parrillo, V. N. (2003). *Strangers to These Shores* (7<sup>th</sup> ed.). Boston: Allyn & Bacon.
- Pearlin, L. I., & Rosenberg, M. (1962). Nurse-Patient Social Distance and the Structured Context of a Mental Hospital. *American Sociological Review*, 27, 517-531.
- Perry, R. W., Gillespie, D. F., & Lotz, R. E. (1976). Attitudinal Variables as Estimates of Behavior. *European Journal of Social Psychology*, 6, 227-243.
- Qualls, C. R., Cox, M. B., & Schehr, T. L. (1992). Racial Attitudes on Campus: Are There Gender Differences? *Journal of College Student Development*, 33, 524-529.
- Raden, D. (1998). American Blacks' and Whites' Preferred Social Distance From Jews. *Journal of Social Psychology*, 138, 265-267.
- Sartain, A. I., & Bell, H. V., Jr. (1949). Evaluation of the Bogardus Scale of Social Distance by the Method of Equal Appearing Intervals. *Journal of Social Psychology*, 29, 85-91.
- Sherif, M., & Sherif, C. (1956). *An Outline of Social Psychology*. New York: Harper & Brothers.
- Sowell, T. (1981). *Ethnic America*. New York: Basic Books.
- Tarter, D. E. (1969). Toward Prediction of Attitude-Action Discrepancy. *Social Forces*, 47, 398-405.
- Ungar, S. (1998). Recycling and the Dampening of Concern: Comparing the Roles of Large and Small Actors in Shaping the Environmental Discourse. *Canadian Review of Sociology and Anthropology*, 35, 253-276.
- U.S. Bureau of the Census. (2001). *Statistical Abstract of the United States*. Washington, DC: U.S. Government Printing Office.
- Walsh, A. (1990). Becoming an American and Liking It as Functions of Social Distance and Severity of Initiation. *Sociological Inquiry*, 60, 177-189.
- Warner, L. G., & DeFleur, M. L. (1969). Attitude as an Interactional Concept. *American Sociological Review*, 34, 153-169.
- Wicker, A. W. (1969). Attitudes Versus Actions: The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects. *Journal of Social Issues*, 25, 41-78.
- Willie, C. V. (1979). *Caste and Class Controversy*. New York: General Hall



- Wilson, T. C. (1996). Cohorts and Prejudice: Whites' Attitudes Toward Blacks, Hispanics, and Asians. *Public Opinion Quarterly*, 60, 253-274.
- Wilson, W. J. (1978). *The Declining Significance of Race*. Chicago: University of Chicago Press.
- Wilson, W. J. (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- Yancey, G. (1999). An Examination of the Effects of Residential and Church Integration on Racial Attitudes of Whites. *Sociological Perspectives*, 42, 279-30.

## Evaluating the Effectiveness of Diversity: What the Military Can Learn from Business

Stephen B. Knouse  
University of Louisiana at Lafayette

James B. Stewart  
The Pennsylvania State University

### **Abstract**

The U.S. military has traditionally led the country in diversity initiatives. American business, however, has moved ahead in certain areas including the evaluation of diversity effectiveness. This paper briefly reviews the literature on diversity effectiveness. It then presents four lessons that the military can learn from business in measuring the effect of diversity: paying attention to moderators, ensuring diversity reaches up the hierarchy, focusing on the right measures, and having an overall framework for gathering measures.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense**

## Evaluating the Effectiveness of Diversity: What the Military Can Learn from Business

Stephen B. Knouse  
Department of Management  
B. I. Moody III College of Business Administration  
University of Louisiana at Lafayette

James B. Stewart  
Department of Labor Relations  
The Pennsylvania State University

Historically, the U.S. military has led the nation in equal opportunity and diversity efforts. For example, the military was the first major U.S. institution to be racially integrated in 1948. Women and minorities have been guaranteed equal pay for equal work in the military. (Dansby, Stewart, & Webb, 2001).

The military, however, has fallen behind in some aspects of diversity. American business, which traditionally lagged behind the military in many aspects of diversity, has now caught up to and surpassed the military in some areas. In particular, business is in the vanguard in measuring the effects of diversity (Knouse & Stewart, 2003). To set the stage, a brief review of the literature on the effects of diversity on various organizational outcomes follows. This paper then examines four lessons that the U.S. military can learn from how business measures the effectiveness of diversity.

### **Review of the Research Literature on the Effects of Diversity on Organizational Outcomes**

#### Organizational Outcomes

Quality. A consistent pattern of high quality in products and services is an indicator of effective organizations. Cross-functional teams (representatives from different functional areas, such as marketing, engineering, and manufacturing) provide multiple sources of communication, informational resources, and perspectives on the problem, which translate into shorter development times and higher quality for new products (Brown & Eisenhardt, 1995; Kessler & Chakrabarti, 1996). Keller (2001) found that functional diversity (differing jobs and technical backgrounds) increased technical quality as well as schedule and budget performance in research and development in several companies.

Financial Performance. Most organizations are interested in profitability measures of financial performance, for example, return on equity (ROE), return on investment (ROI), and return on sales (ROS). Keller (2001) found job and technical diversity improved budget performance. On the other hand, Richard (2000) found that diversity by itself did not affect ROE in the banking industry. When the relationship between diversity and business strategy was

examined, however, ROE improved, if diversity was coupled with a growth strategy. In a recent study, Richard, Barnett, Dwyer, and Chadwick (2004) found a complex relationship between ROE and diversity. A curvilinear relationship (inverted U-shape) between diversity and ROE in banks was positively moderated by entrepreneurial innovativeness, while entrepreneurial risk-taking negatively moderated ROE.

In a study of a large number of organizations listed in COMPUSTAT (a multiyear data set from Standard and Poors on company financial performance) Frink, Robinson, Reithel, Arthur, Ammeter, Ferris, Kaplan, and Morrisette (2003) demonstrated that the proportion of females in the organization exhibited a curvilinear relationship to profitability. This effect was strongest in service, wholesale, and retail industries, where females were a significant part of the customer base, and weakest in the manufacturing, utilities, and financial sectors, where females have been traditionally underrepresented.

Top management team diversity appears to affect organizational financial performance. Simons, Pelled, and Smith (1999) found that diversity among top management teams produced greater sales and profitability when the diversity was more job-related (different jobs, education backgrounds, and time with the company) rather than less job-related diversity (age). Moreover, Smith, Smith, Olian, Sims, O'Bannon, and Scully (1994) found that educational diversity in top management teams was positively related to company financial performance.

Productivity. Frink et al. (2003) also found that the proportion of females in the organization was not related to productivity defined as revenue per employee. Likewise, Richard (2000) did not find that racial diversity affected productivity. The Keller (2001) study found that functional (job and technical) diversity improved performance in meeting schedules.

Market Performance. If workforce diversity improves an organization's knowledge of its various markets, then market performance (e.g., growth in sales due to marketing and an increase in market share) should theoretically improve (Cox, 1994). Frink et al. (2003) showed that the proportion of females in the organization was curvilinearly related to market performance, where the optimal performance was in organizations with about 50% females. On the other hand, Richard (2000) found that racial diversity did not affect market performance in the banking industry.

Turnover. One of the theoretical disadvantages of diversity is increased group and organizational turnover (Cox, 1994; Larkey, 1996). Diversity creates misunderstandings and misperceptions. In addition, diversity creates job stress as individuals try to accommodate different opinions and behavioral patterns (Keller, 2001). Several studies show that individuals in diverse settings resolve their conflicts and job stress by leaving the group or firm (Milliken & Martins, 1996).

Status theory offers one possible explanation for the group effects. In a recent study both men and women preferred to work in male-dominated teams because they perceived these teams to possess more status and power in the organization (Chatman & O'Reilly, 2004).

### Summary of the Effects of Diversity on Organizational Outcomes

The question at hand, however, is whether diversity actually works in organizations. In one review of the literature, Williams and O'Reilly (1998) flatly conclude that diversity hinders group processes and organizational performance. While our review of recent research literature does not lead to such a strictly negative conclusion, it does not find a generally positive linkage between diversity and organizational performance either. In essence, our review finds that diversity works in certain contexts but not in others.

Moreover, functional (job-related) diversity as opposed to representational diversity generally has a positive impact on organizational performance. The effects of representational diversity depend, in part, on organizational characteristics such as the degree of innovativeness, which may be related to openness to new ideas introduced by members of traditionally underrepresented groups. The most positive effects of representational diversity are manifested in service and retail businesses where the specific knowledge that employees from non-traditional backgrounds have can be harnessed to provide increased access to new markets. The positive effects of representational diversity also appear to be generated in organizations where significant diversity exists in higher levels of management.

Indeed, the potentially negative effects of representational diversity on organizational performance can be ameliorated, to some extent, by systematic efforts to manage diversity. A strategic approach to diversity management can reduce problems, such as employee turnover related to diversity-related conflicts as well as work process inefficiencies that arise through limited understanding of co-workers' cultural backgrounds (Knouse & Stewart, 2003).

Our review supports the contention of researchers that context is the important variable in understanding how diversity works in organizations (Jackson, Joshi, & Erhardt, 2003; Triandis, 1995). From the viewpoint of context, there are several lessons from business that can help the military understand the seemingly complex relationship between diversity and organizational effectiveness.

### **Lessons on Diversity**

#### Lesson One: Pay Attention to Moderators That May Influence the Effects of Diversity on Organizational Outcomes

There are several contextual factors that may moderate the effects of diversity including temporal, task, and strategic variables.

Time. In the short run, diverse groups tend to perform worse than homogeneous groups, because individuals working in diverse groups have relatively little in common to provide a basis for building cohesion. Over time, however, as individual members interact more and share interpersonal information, the benefits of diversity can begin to materialize, such as greater pools of information and wider perspectives, that produce richer interactions (Watson, Kumar, & Michaelson, 1993). In addition, over time as individuals receive more information about other group members, their interactions are based more on observable behavior of others rather than

flawed stereotypes that disparage diversity groups (Harrison, Price, & Bell, 1998). Further, over time the group develops a high level of adaptation to heterogeneity (i.e., group members have expectations that diversity is the norm) (Triandis, 1995). The implication for the military is that developing effective diverse teams in the military will take time.

Task-Relatedness of Diversity. The degree of task-relatedness of diversity is another important moderator. Task-related diversity (job, technical, and experience diversity) translates more directly into improved performance than does non-task-related diversity (background variables) (Milliken & Martins, 1996). Apparently, task-related diversity provides task-related informational resources and perspectives, whereas the information and perspectives of non-task-related diversity are less focused on the task at hand. Non-task-related diversity may produce benefits, however, if the organization focuses upon task cohesion rather than social cohesion to funnel the information and perspectives of the group members (Knouse, 1998). In essence, “I don’t have to like my group members as long as I respect their abilities to get the job done.”

In addition, there is a task factor differentiating diverse from homogeneous groups. A meta-analysis of work team research showed that diverse groups were more effective with high difficulty and high complexity tasks than were homogeneous groups that were more suited to tasks of low difficulty and complexity (Bowers, Pharmer, & Salas, 2000). Considering that many of the tasks facing 21<sup>st</sup> century companies are complex and difficult, diversity would seem to be a primary advantage to these companies. Likewise, the military faces high difficulty and high complexity missions in the 21<sup>st</sup> century, which should create opportunities for effective use of diverse teams.

Market-Relatedness of Diversity. A variation of task-relatedness may be the market-relatedness of diversity. Market performance is better in firms that have workforce diversity that parallels the diversity of their customer base (Frink et al., 2003). For example, a larger number of females in a firm may be effective dealing with a customer base containing a large number of females, such as clothing or cosmetics in the retailing industry or child care in the service industry. In this case, representational diversity can create an important comparative advantage in designing culturally appropriate products and marketing them using communication strategies that are particularly effective with specific populations.

For the military, market-relatedness diversity may deliver an advantage to targeted recruiting efforts. For example, reaching Hispanic groups requires culturally appropriate messages as well as compatible communication strategies, such as the use of Spanish in messages, as well as an appeal to familial values (Knouse, Rosenfeld, & Culbertson, 1992).

Organizational Culture. A culture supporting organizational diversity may enhance the benefits of diversity. Positive organizational cultures that promote inclusiveness, communication, and conflict management may allow the benefits of diversity to translate into better organizational performance (Jackson et al, 2003). Organizations that embrace the process of managing diversity seek to become “culturally competent” organizations. Culturally competent organizations have diverse workforces throughout the organization, use diverse work teams to enhance organizational outcomes at all possible levels, and employ coherent strategies

and processes to transform corporate culture to leverage diversity to improve products and services (Lattimer, 1998).

Strategy. Strategy is an extremely important moderator of the impact of diversity on organizational performance. Diversity works better with some strategies than with others (Richard, 2000; Richard, McMillan, Chadwick, & Dwyer, 2003; Richard, Barnett, et al, 2004). For example, diversity enhances strategies of growth and innovation. Logically, if diversity provides greater information and broader perspectives, then strategies requiring this, such as growth into a greater number of markets and innovation into new product and service lines, should benefit directly by such knowledge diversity.

In the military, the Navy is attempting to meld strategy and diversity management in their strategic diversity plan. The plan focuses diversity efforts on development of all sailors toward combat readiness and mission accomplishment (Brown, 2004).

### Lesson Two: Be Sure That Diversity Reaches Up the Hierarchy

Studies of top management teams (e.g., Simons, et al., 1999) show that diversity in these teams increases debate in the firm about important factors, such as mission and strategic direction, which directly influence indicators of organizational performance, such as profitability. Indeed, a number of companies track diversity representation of women and minorities all the way up the hierarchy to top management and even the board of directors (Cole, 2004). Diversity among teams and individuals lower on the hierarchy may produce innovative ideas and creative problem solutions, but these persons may not be in a position to implement these ideas into the core processes of the organization in order to influence the basic organizational performance the unit is trying to measure.

A recent assessment of military leadership and culture recommends culture changes including diversity in leadership to encourage greater risk taking and to overcome the weaknesses of the prevailing risk aversion and zero-defects mentality (Ulmer, Collins, & Jacobs, 2000). The authors argue that traditional cultural characteristics tend to foster dysfunctional conformity, limited opportunities for learning, and excessive micromanagement. Military leaders reinforcing existing cultural values could be highly dysfunctional both for effective management of diversity in the military and for other organizational outcomes. Taken to the extreme, such a view can hamper the capacity to recognize diversity as a resource rather than a threat. The organization's ability to anticipate, monitor, and prevent problematic diversity-related situations is also reduced.

Chemers and Murphy (1995) caution that diversity in leadership can have complex effects. Leaders and subordinates belonging to different ethnic groups may encounter the same objective environment, but perceive the need for differing levels of situational control or leader intervention. In addition, Stewart (2003) reports that senior military leaders who are members of racial/ethnic minority groups, and to a lesser extent women leaders, have somewhat different views about equal opportunity in the military than their majority group and male counterparts.

### Lesson Three: Focus on the Right Measures of Diversity Effectiveness

In the arena of Total Quality Management (TQM), Deming (1986) warned that we tend to use the easy measures of quality – productivity, time on task, and time off task – instead of the important measures that are more difficult to gather, such as customer satisfaction with a product or service.

The Easy versus Important Measures of Diversity Effectiveness. In like manner, the military (and to an extent business) tends to look at the easy measures of diversity effectiveness – percent of women and minorities recruited, their organizational entry rate, their promotion rate, and their turnover numbers. We may, however, be ignoring the important measures; e.g., internal and external customer satisfaction with the results of diversity efforts. In military terms, we should be looking at how internal customers (other units in the organization) and external customers (other commands, the Department of Defense, and the community) are satisfied with the results of unit efforts at diversity. We should also look at how self-improvement efforts of women and minorities affect organizational indicators such as organizational flexibility and adaptability to change.

The Important Measures. The following is a sample list of important measures of diversity effectiveness the military should examine:

1. Return on Diversity – diversity successes compared to costs of diversity initiatives
2. Customer Confidence – survey results of confidence of other units, DoD, and the local community in unit diversity efforts
3. Awards for Diversity Performance – new individual and unit citations for performance of diverse teams
4. Individual Self-Improvement Efforts – percentage of members of diversity groups (e.g., women and minorities) undertaking voluntary self-improvement (seminars, formal courses, degree pursuits, training and development)

There is also a need for a concerted effort to identify core activities, where an increased focus on diversity management can enhance organizational outcomes. Many military activities have business parallels, and private sector strategies can be modified to support these activities. One example is procurement, and private sector strategies of identifying and utilizing minority and women-owned businesses as suppliers could be adapted for many products and services. Other core activities where additional attention to diversity management could yield important dividends for the military include recruiting and training (targeted marketing and development of cross-cultural competencies) and nation-building missions such as Iraq (cross-cultural awareness and cross-cultural competencies). As in the case of existing activities, it will be necessary to develop appropriate measures to assess effectiveness and return on diversity investments.



### Lesson Four: Create a Logical Framework for Diversity Measures

Military diversity measures tend to be arrayed as a laundry list of indicators that have arisen through different purposes and uses. There are counts of individuals in ranks and career areas, percentages of people promoted and retained, and time in grade and service. The military has not yet formulated a logical framework for categorizing these diverse measures of diversity.

**Balanced Scorecard.** The Balanced Scorecard is a business innovation that can be adapted for use in the military (Kaplan & Norton, 1996). The Balanced Scorecard has four categories of measures: financial performance (e.g., return on investment [ROI]), customer (e.g., customer satisfaction, retention, and market share), internal processes (e.g., quality, cost, and response time), and learning and growth (e.g., employee satisfaction). The unifying framework for these four categories is strategy. Strategy sets the basic direction of the organization and sets goals to be attained. These goals then dictate the necessary measures for evaluating whether the goals have been reached.

**A Military Diversity Scorecard.** The Balanced Scorecard fits nicely as a measurement model for diversity in the business arena (Knouse & Stewart, 2003). Similarly, the military could establish a Balanced Scorecard on diversity effectiveness. Whereas business focuses upon strategic outcomes, the military corollary is mission accomplishment. The mission of the organization defines its direction, its performance, and how that performance should be measured. A military Scorecard on Diversity Effectiveness focused upon mission accomplishment might look like Table 1.

**Table 1. A Sample Military Diversity Effectiveness Scorecard**

<b>Scorecard Category</b>	<b>Diversity Area</b>	<b>Measures of Effectiveness in Area</b>	<b>Scores</b>
Performance	Diversity Representation in the Unit	Number of members of diversity groups in the unit	
		Number of members of diversity groups in career areas in the unit	
		Promotion rates of diversity group members	
		Re-enlistment rates of diversity group members	
	Diversity Team Representation	Number of diverse teams (multiple skill mixes, diversity group members)	
		Staffing of diverse teams	
	Performance of Diverse Teams	Scores on readiness, combat, and support exercises	

**Table 1. A Sample Military Diversity Effectiveness Scorecard (continued)**

Customer	Partnering with External Stakeholders of the Unit	Number of partnerships with community diversity affinity organizations	
Internal Processes	Training	Proportion of personnel selected from diversity groups eligible for professional military education	
		Successful completion of professional military education by diversity members	
	Discrimination/ Sexual Harassment Complaints	Total complaints of discrimination	
		Substantiation rate for discrimination complaints	
		Total complaints of sexual harassment	
		Substantiation rate for sexual harassment complaints	
Growth and Learning	Self-Improvement by Diversity Members	Number of internal courses voluntarily taken by diversity group members	
		Number of external courses (outside the organization) taken by diversity group members	
		Number of academic degrees pursued by diversity group members	
		Number of academic degrees completed by diversity group members	
	Awards	Awards won by diverse teams	
		Awards won by the unit for diversity efforts	
	Benchmarking	Best Practices of diverse teams benchmarked by outside units	

### Conclusions

Although the U.S. military has led historically in diversity management initiatives, U.S. business is taking the lead in some areas including the evaluation of diversity effectiveness. The military can learn several lessons from the business arena: pay attention to moderators of diversity effectiveness, be sure diversity reaches up the hierarchy, focus on the right measures, and have an overall framework for gathering diversity measures. Most importantly, the U.S.

military and U.S. business must continually monitor each other's progress in order to identify Best Practices in diversity management that can be cross-adapted to enhance organizational outcomes in both arenas.

## References

- Bowers, C. A., Pharmer, J. A., & Salas, E. (2000). When Member Homogeneity is Needed in Work Teams: A Meta-Analysis. *Small Group Research*, 31, 305-327.
- Brown, C. S. (2004). Vice Admiral Gerald L. Hoewing. *DiversityInc*, 3(2), 42-48.
- Brown, S. L., & Eisenhardt, K. M. (1995). Product Development: Past Research, Present Findings, and Future Directions. *Academy of Management Review*, 20, 343-378.
- Chatman, J. A., & O'Reilly, C. A. (2004). Asymmetric Reactions to Work Group Sex Diversity Among Men and Women. *Academy of Management Journal*, 47, 193-208.
- Chemers, M. & Murphy, S. (1995). Leadership and Diversity in Groups and Organizations. In M. Chemers, S. Oskamp, & M. Costanzo (Eds.), *Diversity in Organizations, New Perspectives For a Changing Workplace*. (pp. 158-188). Thousand Oaks, CA: Sage Publications.
- Cole, Y. (2004). Top 50 Companies For Diversity. *DiversityInc*, 3(3), 50-76.
- Cox, T. (1994). *Cultural Diversity in Organizations: Theory, Research, and Practice*. San Francisco: Berrett-Koehler.
- Dansby, M. R., Stewart, J. B., & Webb, S. C. (2001). *Managing Diversity in the Military*. New Brunswick, NJ: Transaction Publishers.
- Deming, D. E. (1986). *Out of the Crisis*. Cambridge, MA: MIT Institute of Advanced Engineering.
- Frink, D. D., Robinson, R. K., Reithel, B., Arthur, M. M., Ammeter, A. P, Ferris, G. R., Kaplan D. M., & Morrisette, H. S. (2003). Gender Demography and Organizational Performance. *Group and Organization Management*, 28, 127-147.
- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond Relational Demography: Time and the Effects of Surface- and Deep-Level Diversity on Work Group Cohesion. *Academy of Management Journal*, 41, 96-107.
- Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent Research on Team and Organizational Diversity: SWOT Analysis and Implications. *Journal of Management*, 29, 801-830.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard*. Boston: Harvard University Press.
- Keller, R. T. (2001). Cross-Functional Project Groups in Research and New Product Development: Diversity, Communications, Job Stress, and Outcomes. *Academy of Management Journal*, 44, 547-555.

- Kessler, E. H., & Chakrabarti, A. K. (1996). Innovation Speed: A Conceptual Model of Context, Antecedents, and Outcomes. *Academy of Management Review*, 32, 1143-1191.
- Knouse, S. B. (1998). *Keeping "On Task": An Exploration of Task Cohesion in Diverse Military Teams*. (DEOMI RSP 98-1). Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.
- Knouse, S. B., Rosenfeld, P., & Culbertson, A. (1992). *Hispanics in the Workplace*. Thousand Oaks, CA: Sage.
- Knouse, S. B., & Stewart, J. B. (2003). Hard Measures That Support the Business Case for Diversity: A Balanced Scorecard Approach. *The Diversity Factor*, 11(4), 5-11.
- Larkey, L. K. (1996). Toward a Theory of Communicative Interactions in Culturally Diverse Workgroups. *Academy of Management Review*, 32, 463-491.
- Lattimer, R. (1998). The Case For Diversity in Global Business, and the Impact of Diversity on Team Performance. *Competitiveness Review*, 8( 2), 3-17.
- Millikin, F. J., & Martins, L. L. (1996). Searching for Common Threads: Understanding the Multiple Effects of Diversity in Organizational Groups. *Academy of Management Journal*, 21, 402-433.
- Richard, O. (2000). Racial Diversity, Business Strategy, and Firm Performance: A Resource-Based View. *Academy of Management Journal*, 43, 164-177.
- Richard, O., Barnett, T., Dwyer, S., & Chadwick, K. (2004). Cultural Diversity in Management, Firm Performance, and the Moderating Role of Entrepreneurial Orientation Dimensions. *Academy of Management Journal*, 47, 255-266.
- Richard, O., McMillan, A., Chadwick, K., & Dwyer, S. (2003). Employing an Innovation Strategy in Racially Diverse Workforces: Effects on Firm Performance. *Group and Organization Management*, 28, 107-126.
- Simons, T., Pelled, L. H., & Smith, K. A. (1999). Making Use of Difference: Diversity Debate and Decision Comprehensiveness in Top Management Teams. *Academy of Management Journal*, 42, 662-673.
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P., & Scully, J. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39, 412-438.
- Stewart, J. (2003). *Demographic Diversity in the Officer Corps: A Resource for Enhancing Organizational Effectiveness*. DEOMI Research Series Report. Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.

- Ulmer, W., Collins, J., & Jacobs, T. (2000). *American Military Culture in the Twenty-First Century: A Report of the CSIS International Security Program*. Washington, DC: CSIS Press.
- Triandis, H. C. (1995). The Importance of Contexts in Studies of Diversity. In S. E. Jackson & M. N. Ruderman (Eds.), *Diversity in Work Teams: Research Paradigms For a Changing Workplace* (pp. 225-234). Washington, DC: American Psychological Association.
- Watson, W. E., Kumar K., & Michaelsen, L. K. (1993). Cultural Diversity's Impact on Interaction Process and Performance: Comparing Homogeneous and Diverse Task Groups. *Academy of Management Journal*, 36, 590-602.
- Williams, K. Y., & O'Reilly, C. A. (1998). Demography and Diversity in Organizations: A Review of 40 Years of Research. In B. M. Staw & L.L. Cummings (Eds.), *Research in Organizational Behavior*, Vol. 20 (pp. 77-140). Greenwich, CT: JAI Press.

## Equal Opportunity Training in the Military: Toward a Synthesis of Theory and Practice

Dan Landis  
University of Hawaii

Dharm P.S. Bhawuk  
University of Hawaii

### **Abstract**

This paper integrates acculturation theory and cross-cultural training with equal opportunity training in the military context. A brief review of acculturation theory is presented. The authors of this paper have recently shown that depending on the acculturative strategy adopted by the immigrating person (be they academic sojourners, expatriates, or even military personnel) a different training approach is most likely to be efficacious. It is our concept that a “one size fits all” approach to either acculturative or equal opportunity training is neither efficient nor does it produce the positive results desired.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## Equal Opportunity Training in the Military: Toward a Synthesis of Theory and Practice

Dan Landis  
University of Hawaii

Dharm P.S. Bhawuk  
University of Hawaii

The military, in developing the doctrine for equal opportunity training, has adopted a “one size fits all” philosophy. This approach, while understandable given the large number of military personnel, ignores the possibility that people join the services for a variety of reasons and may require somewhat different approaches to deal with the military culture. We have used the term “culture” in the previous sentence deliberately since the military has its own unique roles, norms, and values which are the hallmark of a culture, and the literature on organizational culture further supports the notion that the military has a unique culture from the culture it is a part of.

By analogy to the different reasons why people immigrate from one culture to another, we can suggest at least four patterns for coming into the military. First, some wish to completely submerge into the new culture and spend the rest of their working lives in that situation with little or no interest in maintaining contact or values from their previous situation. Second, some see the military as a way station in their lives and strive to understand and appreciate both where they came from and where they are going. Third, some only wish to keep their original culture and have little interest in learning the new culture. Finally, some have no interest in either their home or their new culture. The latter two are seldom seen in the all-volunteer military, but were not unknown during the period of the draft (and should the draft ever be reinstated, we can expect that they will be seen again in significant numbers). Indeed, if the military is unable to meet significant recruitment goals, we might expect to see such people even sooner as filtering standards are relaxed.

For the purposes of this paper, we will focus more on the first two categories but not slight the last two. In the pages which follow we will outline the integrated theoretical framework for understanding the acculturative process and suggest training approaches that might be expected to work best according to the acculturative strategies adopted by the four groups of recruits. Since this is a theoretical paper, we present no empirical data gathered from military samples but focus on what we have learned about the process of acculturation in a variety of groups from immigrants to expatriates to students.



### **Acculturation Strategy and Intercultural Training: A Synthesis**

A review of intercultural training literature shows that researchers have been preoccupied with what is the best way to prepare people for international assignments or living abroad. This is natural to a new discipline as researchers search for tools to solve problems they face in their discipline. The lecture method did not serve the sojourners well, and thus other methods were explored. The experiential method was quite effective in sensitizing people to cultural differences, and complemented the lecture method well (Bhawuk, 1990; Harrison & Hopkins, 1967).

The culture assimilator emerged as a tool to better prepare sojourners to learn to make isomorphic attribution, and emerged as the winner among intercultural training methods, and has been quite well researched (Albert, 1983; Bhawuk, 2001; Cushner & Landis, 1996). Triandis (1994) codified a theoretical approach to developing culture assimilators, and following a somewhat similar approach Brislin and colleagues developed the first culture general assimilator (Brislin, Cushner, Cherrie, & Young, 1986). These developments combined with the development of culture theories led to some applications of individualism and collectivism to intercultural training (Bhawuk, 2001; Bhawuk & Brislin, 1992; Triandis, Brislin, & Hui, 1988). There are other examples of theoretical innovations (Black & Mendenhall, 1990), and the field has embraced theory quite passionately in the last decade or so (Bhawuk, 1998, 2001; Landis, Bennett, & Bennett, 2004; Landis & Bhagat, 1996; Landis & Bhawuk, 2004). However, the application of acculturation theory to intercultural training has been attempted only recently (Bhawuk, Landis, & Lo, in press). We think this is a promising approach to intercultural training, and attempt to apply it to the equal opportunity training in the military in this chapter.

In a recent paper we (Bhawuk, Landis, & Lo, in press) used Berry's (1990) four-part typology of acculturation as a model to demonstrate how to bridge the acculturation and intercultural training literatures. Berry suggested that the acculturating strategies depend on whether the person emphasizes his or her own native cultural values more or less over the host cultural values (Separation or Assimilation), or decides to create a balance between the two (Integration), or fails to choose either of the two value systems (Marginalization). By synthesizing this model in the Landis & Bhawuk (2004) framework, we provided an integrated framework that shows how we can attempt to bridge these two disciplines (Bhawuk, Landis, & Lo, in press). We also discussed how different intercultural training strategies may need to be used to deal with people who choose different acculturation strategy.

Our synthesis of intercultural research and acculturation suggested that variables like centrality of goals, past experience, intercultural sensitivity, and perceived differences in roles, norms, and values are antecedents to the type of acculturation strategy chosen by people namely, integration, assimilation, separation, and marginalization (Berry & Kim, 1988), and these in turn shape the behavioral intention, leading to the ultimate intercultural behavior. We view intercultural behavior as the final variable of interest to both intercultural training and acculturation researchers.

### **Matching Training with Acculturation Level: A Theoretical Approach**

The basic idea that different training approaches should be used to meet diverse needs of sojourners, the nature of their work, and the different contexts in which they have to operate is well accepted (Bhawuk, 1998, Landis, Brislin, & Hulgus, 1985; Harris, 1992). However, there is no clear guidance from either researchers or seasoned practitioners about how we should approach people who are going through different phases of acculturation or are employing different acculturating strategies. By using Berry's four part acculturation typology and three different types of intercultural training approaches, cognitive, affective, and behavioral, we suggested what sequence may be theoretically most meaningful (Bhawuk, Landis, & Lo, in press).

For example, people who are marginalized are likely to experience emotional stress, since they are not able to accept the dominant cultural values, and are also not able to stand up for their own cultural values and the associated way of life. People going through such an emotional upheaval need therapy or counseling, depending on the severity of their inability to adjust in the dominant culture. Thus, it seems plausible that we should approach people using marginalization strategy with affective intercultural training first. Only when people are able to gain emotional balance can we start with cognitive training to provide them with explanation of why they were experiencing the cultural conflict. Once they have become emotionally stable, and have acquired the necessary cognitive framework to deal with cultural differences, then we could provide behavioral training so that they can start changing their behaviors, and learning new behaviors that are culturally appropriate. Thus, for marginalization strategy we should use first affective, then cognitive, and finally behavioral training approaches. We should also use smaller differences to increase awareness (Bennett, 1986), before proceeding with the discussion of deeper differences in cultural values.

For people who are using the separation strategy, we should start with the cognitive approach to be able to provide them a mental framework to deal with cultural differences. Once they have acquired the cognitive framework, we can help them learn behaviors to concretize the learning, and to also provide them positive reinforcement for learning new behaviors, because only if they learn new behaviors are they going to receive support from the members of the dominant culture. Once they start developing a network by interacting with people of the dominant culture, they could be provided training to deal with the emotional issues. Thus, it seems appropriate to start with a cognitive training for those who are using the separation strategy, then use behavioral training, and finally provide affective training.

Those who are using the assimilation strategy are ready to change, and eager to learn new behaviors. Starting with behavioral training in this case may help the learning motive of these people. Thus, it may be best to start with behavioral training so that the participants feel the trainers are responsive to their needs. Once the trainees are making good progress in learning new behaviors, then they should be provided with cognitive training so that they can develop a framework to appreciate cultural differences. Finally,

they can be provided with affective training to help them deal with the emotional issues of sacrificing one's cultural values to completely assimilate in the dominant culture.

Finally, those who are using the integration strategy are likely to have thought through the issues of acculturation, and therefore, it may be best to start the training program with discussion to help them further develop their framework. This should be followed by behavioral training so that they get to practice what they have thought about, and start interacting with the dominant culture as well as their own ethnic group(s) to maintain a healthy balance between the two. Finally, affective training should be provided to help them confront the tough emotional issues related to cultural differences. Affective training could address the core of their values as this group of people is likely to be ready to confront themselves with serious questions pertaining to their values and adaptation.

It seems that integration would be the ideal acculturating strategy since it goes beyond tolerance of other cultures, and people are likely to become bicultural or multicultural in their thinking and being. It may not be ethical to advise people to move toward integration, but hopefully, with cognitive, affective, and behavioral training given in the right sequence, people would choose to adopt the integration strategy.

### **Consequences of Intercultural Interactions**

Most humans are ethnocentric; that is, they judge other cultures as good to the extent they are similar to their own culture. That is inevitable, because we all grow up in specific cultures and view those cultures as providing the only "correct" answers to the problems of existence (Triandis, 1994). As we encounter other cultures, we may become less ethnocentric, but it is only if we reject our own culture that we can become non-ethnocentric, and that is relatively rare.

Each culture emerges in its own ecology, in ways that favor adjustment to that ecology (Berry, 1967, 1976). The experiences that people have in particular ecologies result in unique ways of perceiving their social environment (Triandis, 1972). Their level of adaptation in making judgments depends on their experiences (Helson, 1964), and a person from an affluent family is likely to have a higher level of income expectation than a person from a poor family. In diverse societies like the United States people can experience different environments and be consequently socialized differently depending on their social economic as well as racial status in the society. For example, people growing up in the inner cities are found to develop an eco-system distrust, which leads them to approach many daily interactions with mistrust usually not found in people of other groups.

When people from different cultures work together their ethnocentrism will result in misunderstandings and low levels of interpersonal attraction. The greater the cultural distance, the lower the rewards that may be experienced from working together. If the behavior of the other people in the work place does not make sense, because people do not make sufficiently similar attributions, one experiences a loss of control. Such loss of

control results in depression (Langer, 1983) and culture shock (Oberg, 1960), and dislike of the other culture's members.

Cultural distance between two cultures, which is reflected in how different the language, religion, etc. are, is a barrier to effective intercultural interactions between people of these cultures. Other barriers to good relationships are differences in economic status and the past history of intergroup conflict. The more different the cultures on these dimensions, the more distant they are from each other.

People from cultures that are very distant face more difficulty interacting with, and adjusting to each other, and are more likely to experience communication breakdowns when they come in contact (Triandis, Kurowski, & Gelfand, 1994). However, people from cultures with smaller cultural distance may also be confronted with major communication problems, as they do not expect from each other to have different basic assumptions and they may be even less aware of their own and the others' cultural backgrounds. Studies have shown that Germans experienced more misunderstandings while working with Americans than while working with Japanese, despite the perceived similarities between the two "western cultures" and the perceived differences between the eastern and western cultures in working styles, attitudes, and so forth (Byrnes, 1986; Friday, 1989).

When people interact with members of other groups by emphasizing their membership in groups rather than their individual characteristics, this leads to increased emphasis on cultural differences and often a dislike for the person. On the other hand, if they pay attention to the personal attributes of the other while ignoring the cultural aspects of the other's behavior, it is possible to develop a liking for the member in spite of the presence of cultural distance (Tajfel, 1982). For this positive affect to develop, contact has to lead to the perception of similarity. Additionally, there should not be a history of conflict between the two cultures, the person should know enough about the other culture to anticipate the culturally determined behaviors of the other person, authorities should favor the contact, the person should know the other's language, they should have common friends, and common or superordinate goals (Triandis et al., 1994). If these conditions do not exist, there is usually considerable social distance, which increases further if the person is insecure and anxious (Triandis & Triandis, 1960).

If there is conflict, stereotyping becomes very negative (Avigdor, 1953), and interpersonal attraction is low or negative. However, if these conditions do exist there can be attraction toward the other, little negative stereotyping, and little social distance. We think, despite the history of conflict between certain groups, other factors like common organizational goals, having common friends, learning the other's language, spending time together, interacting frequently, and so forth can lead to the perception of similarity in the work place, and improve the effectiveness of interpersonal interactions. And this is possible in the military where people are constantly forced to work on superordinate goals.

## Two Conflicting Philosophies

Two approaches have been proposed to deal with diversity on the societal level. First, there is the melting pot conception (Zangwill, 1914), which argues that the best country has a single homogeneous culture. People of different cultures are encouraged to surrender their differences in favor of a "mainstream" language, norms, work ethic, etc, i.e., one culture. For a long time, the United States has been an example of the melting pot philosophy in which people of different European descent adopted English as their language. Since the United States was a British colony, English, the language of the Empire, was readily adopted by non-English speaking immigrants coming to the United States. The melting pot model evolved in the United States in this historic context. Many people in Germany expect migrants from Turkey and other countries to assimilate by accepting the German language and culture, and they are also following this model. Other countries maintain homogeneity by shutting out people who are different from their own. For example, Japan has refused to receive migrants on the grounds that they will reduce the quality of life in that society.

It has been argued by Brewer (1991) that each human strives for "optimal distinctiveness," which is a balance between the forces toward assimilation and merging with groups, and differentiation from groups. The optimal point depends on the culture. This is a finding that has important implications for diversity management in that it can be predicted that people are unlikely to totally assimilate, as is assumed in the melting pot philosophy.

Second, there is the multiculturalism conception, which assumes that each cultural group can preserve much of its original culture, without interfering with the smooth functioning of the society. Canada has an official multicultural policy. The multiculturalism viewpoint supposes that each individual will develop a good deal of understanding of the point of view of members of the other cultures, and learn to make isomorphic attributions<sup>4</sup> (Triandis, 1975). The basis of this multicultural model is that each cultural group can preserve its original culture and still function in a larger society (Okamura, 1998). Such a model requires that each individual understand the viewpoints of other cultures. The society in Hawaii with twelve major groups (Whites, Japanese, Filipinos, Native Hawaiians, Chinese, Portuguese, African Americans, Koreans, Okinawans, Puerto Ricans, Samoans, and Vietnamese, in order of decreasing size) offers an example of multiculturalism. When the world was quite divided along cultural lines, Fuchs (1961) proposed that Hawaii offered "...a promise for the entire nation and indeed the world, that people of different races and creeds can live together, enriching each other, in harmony and democracy."

The current diversity movement in the United States is moving away from the melting pot metaphor to the multiculturalism metaphor, or what can be termed the "Salad Bowl" metaphor, where every ingredient in a salad bowl retains its distinctive quality, and

---

<sup>4</sup> When a person learns to make attributions concerning the causes of behavior of members of the other culture that are more or less like the attributes that these members make in explaining their own behavior, he or she is said to be making isomorphic attribution.

the distinctive qualities add to each other. Clearly, the military needs to embrace the philosophy of multiculturalism.

### **Military Equal Opportunity Training**

Summarizing the history of equal opportunity (EO) training in the military is beyond the scope of this paper. Such a history can be found in a number of sources (Day, 1983; Hope, 1979; Dansby & Landis, 1996, 2001). As Dansby and Landis noted, the EO training philosophy has embodied five principles: “(1) a focus on behavioral change and compliance with stated policy; (2) emphasis on equal opportunity and intercultural understanding as military readiness issues; (3) an understanding that equal opportunity is a commander’s responsibility; (4) a belief that education and training can bring about desired behavioral changes; and (5) reliance on affirmative action plans as a method for ensuring equity and diversity.” (Dansby & Landis, 2001, p.15) At the same time as the above principles focus on behavioral change as the desired end product of training, the military recognized in 1987 the importance of attitudes as either a precursor or a concomitant of such changes. This recognition was implemented through the development of the Military Equal Opportunity Climate Survey (MEOCS) (Landis, Dansby, & Tallarigo, 1996). The release of the MEOCS to the field in 1990 has spawned a large number of studies (Dansby, Stewart, & Webb, 2001). However, the exact relationship between climate and behavior has never been critically examined; it has been assumed that units with a poor “climate” would do less well in combat or support roles than units with a good “climate.”

Although EO training began with an emphasis on African-Americans, over the years it expanded to include other racial/ethnic/religious minorities (e.g., Hispanics, Asians, Native-Americans, Jews, Muslims, etc.). How the cultural characteristics of these various groups are reflected in the achievement of the above five principles is not clear and are probably honored more in the breach (by the use of special observance days, etc.) than in practice.

More to the point of this paper is the need to capture the latest theoretical thinking in acculturation, for if the military is anything, it is a culture with its own unique values, roles, norms, and expected behaviors. Although the contact hypothesis of Gordon Allport (1954) has formed the basis of much of the training (which focused on the reduction of prejudice against minority group members), the full implementation of his principles is not at all clear in the military setting. Allport proposed that prejudice “may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports...and provided it is of a sort that leads to the perception of common interests and common humanity between members of the two groups” (Allport, 1954, p. 281).

In the years since Allport first proposed the contact hypothesis, there has been much research by Pettigrew and others that has demonstrated the essential validity of the model but little of that research has been done within the military milieu. It should be

clear that many of Allport's conditions are applicable to the military. Specifically, through directives and law it is clear that there is institutional support for equal treatment. Less clear is that equal status contact (in a hierarchical organization) actually occurs. In any case, it is also true that since 1954, theories of acculturation have flourished primarily within the academic sojourner and expatriate literature (Landis, Bennett, & Bennett, 2004). In particular, we would point to Berry's fourfold theory of acculturation which suggests that people enter into a new culture for a variety of motives summarized at the beginning of this paper.

### **Implications for Military Equal Opportunity Training**

In a recent paper (Bhawuk, Landis, & Ho, in press), we have suggested ways in which an individual differences model can be used to integrate a particular theory of acculturation with training modalities. We summarized these ideas above, and here we discuss each of them in the context of the military EO training. But before we do that we would like to raise some issues that have not been discussed in the literature, but are relevant to issues related to acculturation.

In the military the enlisted people are likely to be without even high school degrees and come from middle class or lower middle class stratum of the society, whereas the officers are likely to have a college degree and come from the middle class. This class structure in the military can be a source of cultural conflict (Cortright, 1975). Also, many of the enlisted African American, Hispanic, or other minority group people are likely to come from the inner cities, and may bring the "eco-system distrust," (Triandis, 1976) which would require a very special training program to be able to fully integrate them in the military. We are not aware of any EO training program<sup>5</sup> that is currently available in the military to meet this special need. We suspect that the military leaders believe that the boot camp training completely and thoroughly homogenizes and assimilates the enlisted people in the military. Our understanding of cultural theory warns us that such assumption is likely to be wishful thinking. We propose that a special program should be developed to deal with people who have not been allowed to deal with deep emotional issues that they experienced before joining the military. This should be followed by a cognitive training program to provide the necessary conceptual understanding of the issues, and that behavioral training should be presented in the end to help people learn the new behaviors that will allow them to integrate in the military society successfully.

People who are not able to choose between either their own or the host cultural values are often marginalized. In the military this could happen to those who think that the military is a discriminating institution, and the policies to create a level field for people of all races and women is only talk. We know that the woman who blew the whistle on the U.S. Navy pilots, which led to what is known as the "Tailhook" scandal, ultimately committed suicide. However, to reject all attempts of the institution as

---

<sup>5</sup> The development of an Army culture sensitizer in the early 1970s focused on interactions between junior grade officers and minority enlisted personnel (Landis, Day, McGrew, Thomas, & Miller, 1976; Hart, Day, Landis, & McGrew, 1988) was not implemented to any great degree.

insincere and a cover-up borders on conspiracy theory, and needs to be addressed through counseling. As we mentioned earlier, people going through such an emotional upheaval need therapy or counseling, depending on the severity of their inability to adjust in the military culture, and cognitive and behavioral training should follow after this training.

In the military people spend most of their waking time in group activities, and they do not have a choice to pick who they work with. Therefore, we are likely to find people use the separation strategy in the social hours, when they spend time with people with similar race, gender, or sexual preference. We could allow this space to people for functional reasons, however, from intercultural perspective this is a symptom of separation, and can be effectively addressed. As mentioned earlier, we should start with the cognitive approach by having a discussion of the benefits of racial integration in our private life, beyond work hours. This will help them acquire a mental framework to deal with cultural differences. Opportunities would need to be created for people to interact in those social hours with people who are different from them, and try to understand their worldviews. These activities would help them develop a network by interacting with people that are different, and then they could be provided affective training to deal with the emotional issues.

We think the existing EO training programs are suitable for those who are using the assimilation strategy and are ready to change, and eager to learn the military way. As suggested earlier, behavioral training would be most effective so that the participants can quickly learn the military culture. However, once they have learned the military way, they should be provided with cognitive training so that they can develop a framework to appreciate cultural differences, instead of brushing these differences away. One argument could be that they need to be productive members of the society outside the military, and learning these skills would facilitate their adaptation to the larger outside society that is diverse. Affective training could be offered to those who are interested in becoming culturally competent, and could be used as a part of the enrichment program.

Finally, those who are using the integration strategy are likely to come from multicultural societies like Hawaii, and may be sophisticated intercultural. They may profit from verbalization of what they already know implicitly. Therefore, it may be best to start the training program with discussion to help them further develop their cognitive framework. This should be followed by behavioral training, and lastly by affective training. As discussed above, the affective training could be offered as a part of an enrichment training package for those who are interested in polishing their intercultural skills to the highest level.

It seems that to begin with the existing assimilation focused training offered by the military may work for most groups, except those who are suffering from marginalization. However, a more refined approach should be experimented to evolve the best way to train our enlisted soldiers as well as our officers. In applying the above theoretical considerations to the military setting, we would suggest that equal opportunity advisors recognize that individuals are in the service for a variety of reasons and those reasons have precursors. Training in EO that is effective will be one that addresses those



precursors. In some cases, information giving (cognitive) may precede affective or behavioral modification training. In other cases, behavioral may be followed by cognitive training. The overall goal has to be, in Berry's terminology, development of an integration strategy and avoiding assimilation, separation, or marginalization. In the present manpower climate with force levels stretched beyond reasonable levels, the loss of service people due to adoption of the latter three acculturation strategies means a loss of valuable people and cannot be tolerated.

### Summary

Intercultural training researchers have been concerned about the development of the best training approach for most of the past 50 years, as much as they have been concerned about the evaluation of the effectiveness of intercultural training programs. This might have been because the field has been in its early phase of development, and needed to create its identity and defend its turf. With the *Handbook of Intercultural Training* in its third edition, the *International Journal of Intercultural Relations* in its 28<sup>th</sup> year, and the International Academy for Intercultural Research moving toward its fourth biannual conference in 2005, the discipline of intercultural training needs to go beyond fear of identity crisis. The discipline needs to boldly start building bridges between associated research disciplines. We took the first step toward this goal, and presented an application of this framework to the military equal opportunity training.

We suggested how different training tools could be effectively used to train people who are using different acculturating strategies in the military. It is reasonable to treat those who are using integration strategy differently from those who are using marginalization, separation, or assimilation. We hope scholars would examine our ideas and test some of these ideas in future research so that we can advance the field of intercultural training and acculturation together.

## REFERENCES

- Allport, G. (1954). *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley.
- Albert, R. D. (1983). The Intercultural Sensitizer or Culture Assimilator: A Cognitive Approach. In D. Landis & R. W. Brislin (Eds.), *Handbook of Intercultural Training: Issues in Training Methodology* (Vol. 2, pp. 186-217). New York: Pergamon.
- Avigdor, R. (1953). Etudes Experimentales de la Genese des Stereotypes. *Cahiers Internationaux de Sociologie*, 5, 154-168.
- Bennett, M.J. (1986). A Developmental Approach to Training for Intercultural Sensitivity. *International Journal of Intercultural Relations*, 10, 179-195.
- Berry, J.W. (1967). Independence and Conformity in Subsistence Level Societies. *Journal of Personality and Social Psychology*, 7, 415-418.
- Berry, J. W. (1976). *Human Ecology and Cognitive Style*. Beverly Hills, CA: Sage.
- Berry, J. W. (1990). Psychology of Acculturation: Understanding Individuals Moving Between Cultures. In R. W. Brislin (ed.), *Applied Cross-Cultural Psychology* (pp. 232-253). Newbury Park, CA: Sage.
- Berry, J. W., & Kim, U. (1988). Acculturation and Mental Health. In P. Dasen, J. W. Berry, & N. Sartorius (Eds.), *Health and Cross-Cultural Psychology* (pp. 207-236). London: Sage.
- Bhawuk, D. P. S. (2001). Evolution of Culture Assimilators: Toward Theory-Based Assimilators. *International Journal of Intercultural Relations*, 25 (2), 141-163.
- Bhawuk, D. P. S. (1998). The Role of Culture Theory in Cross-Cultural Training: A Multimethod Study of Culture-Specific, Culture-General, and Culture Theory-Based Assimilators. *Journal of Cross-Cultural Psychology* 29 (5), 630-655.
- Bhawuk, D. P. S. (1990). Cross-Cultural Orientation Programs. In R. W. Brislin (Ed.), *Applied Cross-Cultural Psychology* (pp. 325-346). Newbury Park, CA: Sage.
- Bhawuk, D. P. S., & Brislin, R. W. (1992). The Measurement of Intercultural Sensitivity Using the Concepts of Individualism and Collectivism. *International Journal of Intercultural Relations*, 16, 413-436.
- Bhawuk, D. P. S., Landis, D., & Lo, K. (in press). Acculturation and Intercultural Training: An Integrated Theoretical Framework. In D. Sam & J. W. Berry (eds.), *Cambridge Handbook of Acculturation*. Cambridge, England: Cambridge University Press.

- Black, J. S., & Mendenhall, M. (1990). Cross-Cultural Training Effectiveness: A Review and Theoretical Framework for Future Research. *American Management Review*, 15, 113-136.
- Brewer, M. B. (1991). The Social Self: On Being the Same and Different at the Same Time. *Personality and Social Psychology Bulletin*, 17, 475-485.
- Brislin, R. W., Cushner, K., Cherrie, C., & Yong, M. (1986). *Intercultural Interactions: A Practical Guide*. Beverly Hills, CA: Sage.
- Byrnes, H. (1986). Interactional Style in German and American Conversations. 6/2, pp. 189-206.
- Cortright, D. (1975). *Soldiers in Revolt: The American Military Today*. New York: Anchor/Doubleday.
- Cushner, K., & Landis, D. (1996). The Intercultural Sensitizer. In D. Landis & R. Bhagat (Eds.), *Handbook of Intercultural Training* (2<sup>nd</sup> ed., pp. 185-202), Thousand Oaks, CA: Sage.
- Dansby, M. & Landis, D. (1996). Intercultural Training in the Military. In D. Landis & R. Bhagat (Eds.), *Handbook of Intercultural Training* (2<sup>nd</sup> ed., pp. 203-215). Thousand Oaks, CA: Sage.
- Dansby, M. & Landis, D. (2001). Intercultural Training in the United States Military. In M. Dansby, J. Stewart & S. Webb (Eds.), *Managing Diversity in the Military* (pp. 9-28). New Brunswick: Transaction.
- Dansby, M., Stewart, J. & Webb, S. (Eds.). (2001). *Managing Diversity in the Military*. New Brunswick: Transaction.
- Day, H. (1983). Race Relation Training in the U.S. Military. In D. Landis & R. Brislin (Eds.), *Handbook of Intercultural Training, Vol. II*. (pp. 241-289). Elmsford, NY: Pergamon.
- Friday, R.A. (1989). Contrasts in Discussion Behaviors of German and American Managers. *International Journal of Intercultural Relations*, 13, 429-446.
- Fuchs, L. (1961). *Hawaii Pono*. Honolulu, HI: University of Hawaii Press.

- Harris, J. K. (1992). Individual and Combined Effects of Behavior Modeling and the Culture Assimilator in Cross-Cultural Management Training. *Journal of Applied Psychology*, 77, 952-962.
- Harrison, R., & Hopkins, R. L., (1967). The Design of Cross-Cultural Training: An Alternative to the University Model. *Journal of Applied Behavioral Science*, 3, 431-460.
- Hart, R., Day, H., Landis, D., & McGrew, P. (1988). "Cultural Assimilator for Training Army Personnel in Racial Understanding." In J. Thomas (Ed.), *Race Relations Research in the U.S. Army in the 1970s: A Collection of Selected Readings*. Arlington: United States Army Research Institute for the Behavioral and Social Sciences.
- Helson, H. (1964). *Adaptation Level Theory*. New York: Harper and Row.
- Hope, R. (1979). *Racial Strife in the U.S. Military: Toward the Elimination of Racism*. New York: Praeger.
- Landis, D., Day, H., McGrew, P., Thomas, J. & Miller, A. (1976). Can a Black "Culture Assimilator" Increase Racial Understanding? *Journal of Social Issues*, 31, 169-183.
- Landis, D. & Bhagat, R. (1996). *Handbook of Intercultural Training*, (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Landis, D. & Bhawuk, D. P. S. (2004). Synthesizing Theory Building and Practice in Intercultural Training. In D. Landis, M. Bennett, & J. Bennett (Eds.), *Handbook of Intercultural Training* (3<sup>rd</sup> ed., pp. 451-466). Thousand Oaks, CA: Sage.
- Landis, D., Bennett, M., & Bennett, J. (2004). *Handbook of Intercultural Training*, (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Landis, D., Brislin, R. W., & Hulgus, J. (1985). Attribution Training Versus Contact in Acculturative Training: A Laboratory Study. *Journal of Applied Social Psychology*, 15, 466-482.
- Landis, D., Dansby, M. & Tallarigo, R. (1996). The Use of Equal Opportunity Climate in Intercultural Training. In D. Landis & R. Bhagat (Eds.) *Handbook of Intercultural Training*, (2<sup>nd</sup> ed., pp. 244-263). Thousand Oaks, CA: Sage.
- Langer, E. J. (1983). *The Psychology of Control*. Beverly Hills, CA: Sage.
- Oberg, K. (1960). Culture Shock: Adjustment to New Cultural Environments. *Practical Anthropology*, 7, 177-182.

- Okamura, J. Y. (1998). The Illusion of Paradise: Privileging Multiculturalism in Hawaii. In D. C. Gladney (Ed.) *Making Majorities: Constituting the Nation in Japan, Korea, China, Malaysia, Fiji, Turkey, and the United States* (pp. 264-284).
- Tajfel, H. (1982). *Social Identity and Intergroup Relations*. New York: Cambridge University Press.
- Triandis, H.C. (1975). Cultural Training, Cognitive Complexity, and Interpersonal Attitudes. In R.W. Brislin, S. Bochner, & W.J. Lonner (Eds.). *Cross-Cultural Perspectives on Learning*. Beverly Hills, CA: Sage.
- Triandis, H.C. (1972). *The Analysis of Subjective Culture*. New York: Wiley.
- Triandis, H.C. (1976). *Variations in Black and White Perceptions of the Social Environment*. Urbana, IL: University of Illinois Press.
- Triandis, H.C. (1994). *Culture and Social Behavior*. New York: McGraw-Hill.
- Triandis, H., Brislin, H. & Hui, C. (1988). Cross-Cultural Training Across the Individualism-Collectivism Divide. *International Journal of Intercultural Relations*, 12, 269-289.
- Triandis, H.C., Kurowski, L. L. & Gelfand, M. J. (1994). Workplace Diversity. In H.C. Triandis, M. Dunnette, & L. Hough (Eds.) *Handbook of Industrial and Organizational Psychology*. Palo Alto, CA: Consulting Psychologists Press.
- Triandis, H.C. & Triandis, L.M. (1960). Race, Social Class, Religion, and Nationality as Determinants of Social Distance. *Journal of Abnormal and Social Psychology*, 61, 110-118.
- Zangwill, I. (1914). The Melting Pot: Drama in Four Acts. New York: Macmillan.

## Mobilization and Diversity in the U.S. Armed Forces<sup>6</sup>

David R. Segal and Mady W. Segal  
University of Maryland

### **Abstract**

The American armed forces were relatively small for most of our history, but expanded through militia mobilization, recruitment, and conscription when we went to war. The personnel needs generated by these mobilizations led to increasing diversity of the force through the progressive inclusion, and subsequent desegregation, of non-English speaking Europeans, African Americans, Asians, and Hispanics. Gender integration is an ongoing process, with women being allowed to serve, no longer being segregated in their own branch, but still being excluded on the basis of gender from some occupations and some positions. The opening of military roles to previously excluded groups has implications for the extension of citizenship rights to these groups.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

---

<sup>6</sup> Preparation of this paper was supported in part by the Army Research Institute.

## Mobilization and Diversity in the U.S. Armed Forces

David R. Segal and Mady W. Segal  
University of Maryland

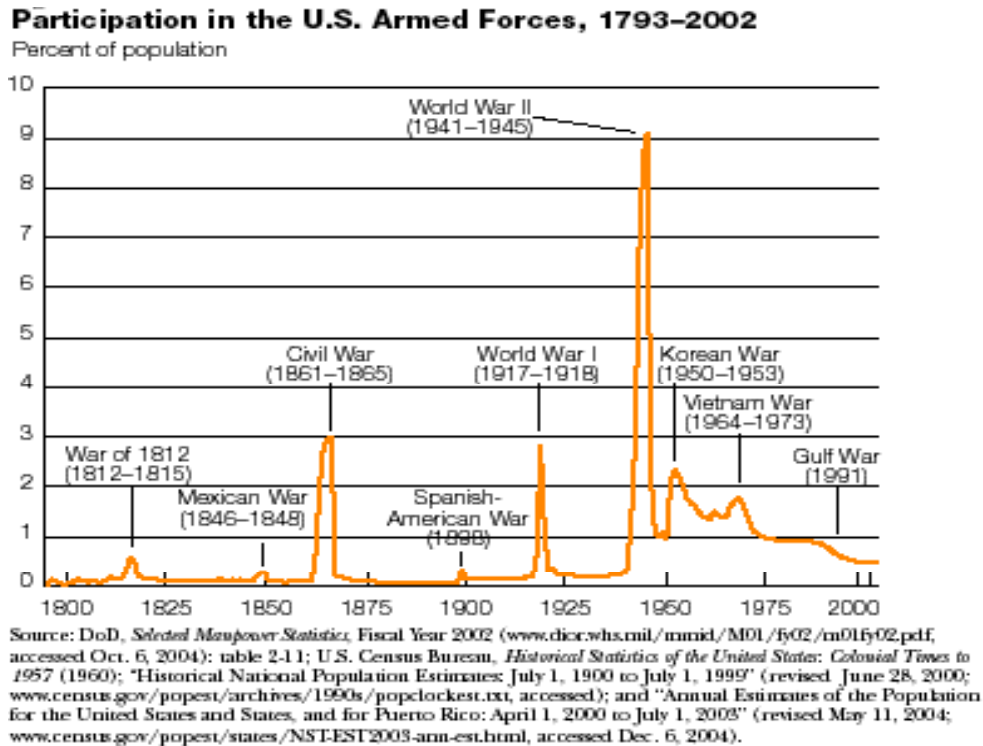
For most of United States history, less than one percent of the population served in the military, except for brief periods when the country was at war (Segal & Segal, 2004; see Figure 1). The armed militias that formed during the American colonial era were fairly homogeneous. Members were all male and predominantly from White European backgrounds, British at first, with other nationalities added as the nation expanded and as waves of immigration made the nation's population more diverse. From the time of the American Revolution, military service was linked to citizenship and helped define the relationship between the individual and the state (Kestbaum, 2000). Military service was expected of male citizens and at times it was a way of expediting citizenship for non-citizens.

There were notable surges in the relative size of the force during the first half of the 19th century for the War of 1812 and the Mexican War of 1846-1848, but the annual military participation ratio (MPR), the percentage of the total resident population serving in the active-duty military (Andreski, 1968), did not approach three percent of the population until the Civil War in the mid-1860s. More than one million men, mobilized largely by militia call-ups and conscription, served under arms between 1861 and 1865. The MPR then declined again until the First World War, when almost three percent of the population--almost three million men--served. Again, mobilization involved calling up the militia, supplemented by selective conscription.

The pattern of surge and decline in the size of the armed forces changed when the country mobilized for World War II. About 16 million people were brought into the armed forces in the 1940s, including more than 200,000 women. The men were largely conscripts (10.1 million); women were not subject to the draft, and all women in uniform were volunteers. The World War II armed forces represented about 12 percent of the population and included about 56 percent of the men eligible for military service on the basis of age, health, and mental aptitude.

As America began to demobilize its military after World War II, North Korean forces, supported by the People's Republic of China, invaded South Korea, and the United States sent armed forces to South Korea. The remobilization drew heavily on the small generation of Americans born during the Great Depression. The subsequent hostilities in Vietnam led to another remobilization in the late 1960s, this time calling up a relatively small proportion of the early "Baby Boom" generation born in the 1940s and 1950s. The armed forces shrank after the United States withdrew from Vietnam, accompanied in 1973 by the end of military conscription. The military sought to maintain a relatively large peacetime force of about two million people in uniform, or one percent of the population on a voluntary basis. A further demobilization came after the collapse of America's primary Cold War adversaries--the Soviet Union and the Warsaw pact alliance in Eastern Europe. Following historical patterns, this might be regarded as our post-World War II demobilization, delayed by the Korean War, the Cold War, and the

Figure 1



Vietnam War. This drawdown of forces was paused at the end of the 1980s to provide personnel for the Persian Gulf War, and for the wars in Afghanistan and Iraq in the early 21<sup>st</sup> century. In 2004, the military consists of about 1.4 million uniformed active duty personnel. During each period of mobilization, the definition of who was to be mobilized was expanded. These expansions were frequently met with resistance, in part because military inclusion was recognized to have implications for citizenship rights.

### Ethnicity

Men from a range of European national backgrounds served in the colonial militias in the 18th century. Some served in units defined by ethnicity and language. In 1776, Congress authorized a German Battalion for the Continental Army, with companies drawn from Maryland and Pennsylvania. The annexation of the Republic of Texas in 1845, and the influx of immigrants in the middle of the 19th century (2.6 million arrived in the 1850s) gave a particularly international flavor to the Civil War. Mexican Americans served on both sides of the Civil War. State militias supplied to the Union army units such as the First German Rifles (8<sup>th</sup> New York Infantry), and the Irish Brigade (drawn from the Massachusetts and New York militias). About 22 percent of the Union army was foreign born, as were at least a third of Navy personnel. The foreign-born share of soldiers increased to about half in the decade following the Civil War, as new immigrants found military service to be a good source of employment and a convenient path of transition to a new society. Concern about the economic and political consequences of having such a large “non-American” force led to the passage of a law in 1894 that limited new enlistments to American Indians, citizens, and men who indicated that they intended to become citizens and could read, write, and speak English. This was one of the first attempts to impose ethnic closure on military service in America (Segal & Kestnbaum, 2003).



By the time the United States went to war with Spain in 1898, the Army was “only” 25 percent foreign-born. About 15 percent of the total United States population was foreign born in 1890 (U.S. Census Bureau, 1999). Thus, this sector of the population was overrepresented in the Army.

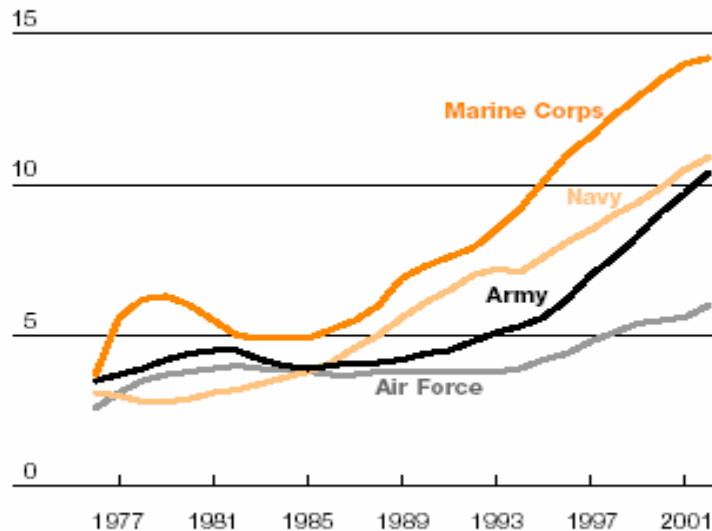
The mobilization for World War I provided a polyglot army through a conscription law that made all aliens who declared an intention to become citizens, other than those from Germany and the Central Powers, subject to the draft. For example, the commander of the 77<sup>th</sup> Infantry Division, a unit manned by draftees from the New York area, claimed that 43 languages and dialects were used in his unit. Large numbers of draftees could not speak English, and initially they were assigned to units that performed menial labor. The Army also became an English-language training institution, and thousands of immigrants learned English through military service. For the most part, European ethnic group members were integrated throughout the Army, with occasional exceptions. The 99<sup>th</sup> Infantry Battalion in World War II, for example, was all Norwegian American and was trained for an invasion of German-occupied Norway. Also in World War II, two primarily Spanish-speaking New Mexico National Guard units—the 200<sup>th</sup> and 515<sup>th</sup> Coast Artillery battalions, were stationed in the Philippines before the war, captured on the Bataan Peninsula, and had to endure the 85-mile “Death March” to Japanese prison camps. Other largely Spanish-speaking units from the Arizona and Texas National Guards saw extensive combat in the Pacific and in Europe. After the Spanish-American War, with a great interest in the annexation of Puerto Rico, Congress authorized the formation of a battalion of Puerto Rican troops. This unit evolved into the 65<sup>th</sup> Infantry, which guarded the Panama Canal for most of the two World Wars.

The descendants of European ethnic groups that arrived in earlier immigration waves have been integrated into the military and are no longer monitored. About the time the United States adopted an all-volunteer military, however, the U.S. Census Bureau began to monitor the rapidly growing United States Hispanic population—an amalgam of several ethnic groups of Spanish or Latin American descent, dominated numerically by Hispanics of Mexican origin. The military recognized that this rapidly growing segment of the youth population was an important part of the recruiting pool (Segal & Segal, 1991). In 1995, 15 percent of the civilian youth population was Hispanic, although this group accounted for only nine percent of military personnel (Armor, 1996). The percentage of 18-year-old civilians who are Hispanic is projected to reach at least 22 percent by 2020 (National Research Council, 2003). Hispanic representation increased in the enlisted ranks of the military in the era of the volunteer force, from about two percent in 1975, when the Hispanic category was first used, to 10 percent in 2001. But the Hispanic share is still below that of African Americans, who have twice as many enlisted men and more than three times as many enlisted women. Hispanic representation has been greatest among the Marine Corps, where it reached almost 15 percent among enlisted personnel in 2001; the Hispanic share is lowest among Air Force personnel, where it hovered at about four percent until the late 1990s (see Figure 2).

Figure 2

### Hispanic Share of Enlisted Personnel and Officers by Service, 1976–2002

Percent of enlisted personnel



Source: DoD, *Population Representation in the Military Services, FY2003* (2004): tables D-18 and D-28.

The commissioning of Hispanics as officers has lagged well behind their recruitment into enlisted ranks and falls below their share of civilian college graduates. Four percent of officers are Hispanic, compared with six percent of college graduates ages 21 to 35 and 10 percent of enlisted personnel.

### Race

While the early militias and the Continental Army were predominantly White, Blacks, American Indians, and Asians served in various capacities for years, although they were often separated from the White soldiers. American Indians served in the military beginning in colonial times. They were segregated in separate units as scouts and auxiliaries during the 19<sup>th</sup> century, but by the Spanish-American War in 1898 they were serving throughout the Army despite political pressure to continue their segregation.

The major exceptions to this pattern were communications units--the famous American Indian Code Talkers--recruited in the two World Wars. American Indians helped convert their unwritten native languages into virtually unbreakable codes for transmitting sensitive information.

The first Asian or Pacific people to serve in the United States Army were the Philippine Scouts, who were organized in company-sized units of about 100 soldiers starting in the late 19<sup>th</sup> century, and who remained a separate unit until World War II. Late in the 19<sup>th</sup> century, the Navy opened the Messmen's and Steward's Branch--previously reserved for African Americans--to Asians. Filipino messmen outnumbered African Americans in the Messman's and Steward's Branch by the beginning of World War I. The Navy halted Filipino enlistments in the 1930s,

resuming them only after the Philippines gained independence in 1946. Filipinos were recruited into the only racially segregated branch of the Navy. The Navy had briefly experimented with segregated ships in World War I--the entire crew of one destroyer was from the Philippines and another was from Guam--but the experiment was abandoned in 1920 in part because it was difficult to recruit all the specialties and ranks required for a ship from a limited population.

During World War II, most Japanese American men who had been drafted into the Army, and all those who volunteered during the war, were segregated in the 100<sup>th</sup> Infantry Battalion and the 442<sup>nd</sup> Regimental Combat Team. These units were kept out of the Pacific theatre so they would not be fighting against Japanese forces, but both units distinguished themselves in combat in Europe. The War Department allowed up to 500 second-generation Japanese American women to join the Women's Army Corps during World War II, with a smaller number joining the Army Medical Corps (Moore, 2003). After the war, Japanese Americans were integrated into all branches of the United States armed services.

Black men have served in every war that America ever fought, but African Americans were not integrated into the military as rapidly as American Indians or Asian Americans. Although they held lower status than White soldiers, thousands of Black men fought in the American Revolutionary War and in the naval forces in the war against France from 1798 to 1800. In the War of 1812, Andrew Jackson used free Black men in Louisiana to help defend New Orleans from the British. But Blacks were generally not allowed to serve during peacetime. Congress authorized the service of Black men in the Union forces during the Civil War. Blacks served in racially segregated units and accounted for about 10 percent of Army personnel. In the Navy, Blacks served on integrated crews, although primarily at the lowest ranks and in menial jobs, making up about a quarter of Navy personnel. At the end of the war, Congress established four Black regiments--the 24<sup>th</sup> and 25<sup>th</sup> Infantry, and the 9<sup>th</sup> and 10<sup>th</sup> Cavalry--which represented about 10 percent of Army personnel.

The mobilization for the Korean War in 1950 essentially forced the Army to end racial segregation. One quarter of the new Army's recruits were Black--more than the segregated training bases and operational units could absorb, and Blacks were brought into formerly all-White units. Research showed that integrated units performed better than segregated units, bolstering the case for wider racial integration (Bogart, 1969). By 1954, all-Black units were abolished and the Army was racially integrated.

During the Vietnam War, the Kennedy administration departed from past practice and used the draft rather than the overwhelmingly White reserve components to mobilize American forces for Southeast Asia. When Kennedy assumed office, Blacks were underrepresented in the military, but the Selective Service System disproportionately drafted the poor during the early years of the Vietnam War, and Black men were overrepresented among the poor. In the early months of the Vietnam War, Blacks accounted for about 20 percent of combat deaths in Vietnam, although they were only 11 percent of the military-age population. The high death toll for Black soldiers led to claims of racial injustice--that Blacks were fighting and dying to further the interests of White men, while still treated unfairly at home. Some critics saw further injustice in the fact that U.S. Blacks were fighting and killing other non-Whites--the Vietnamese. To avoid the appearance of racial discrimination, the Pentagon reduced the assignment of Blacks to

combat jobs, and combat deaths for Blacks fell to about 12 percent, closer to their share of the total U.S. population (Binkin & Eitelberg, 1982).

Blacks assumed even greater representation in the military after the draft ended in 1973—a result not intended or expected by the architects of the post-Vietnam volunteer military (see Figure 3). The relative number of Black enlistees was especially high among ground combat forces (Janowitz & Moskos, 1974). Black men (and, increasingly, Black women in non-combat forces) perceived the military to be a more racially fair employer than the civilian labor force, and indeed the volunteer force would not have met its manpower goals without the increased representation of Blacks. But the overrepresentation of Black men in combat units again raised the politically unpopular specter of disproportionate casualties among Blacks in the case of war. While the representation of Blacks in the labor force was increasing, personnel policies deliberately reduced the share of Blacks in combat units in the late 20<sup>th</sup> century (Segal & Verdugo, 1994).

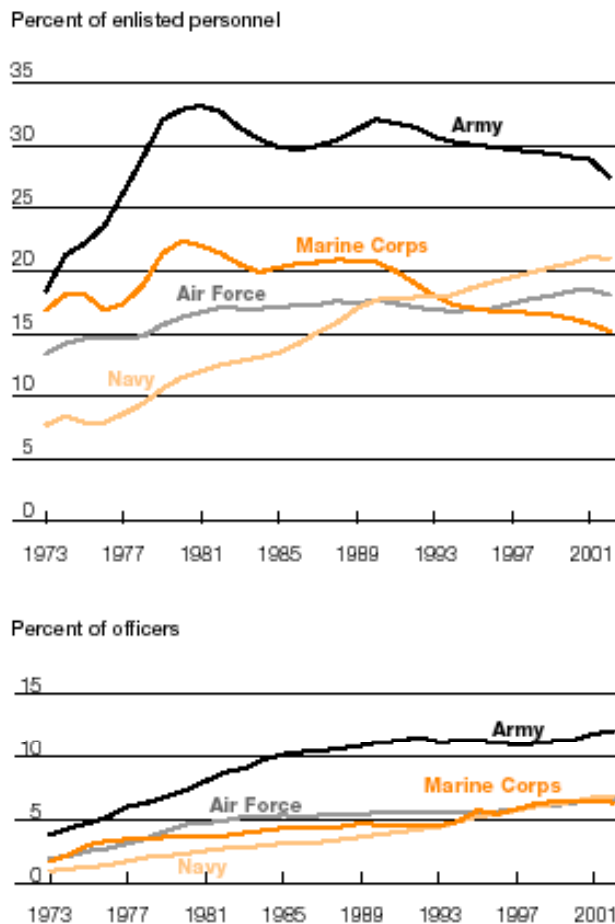
The African American share of all military personnel began to stabilize after 1990 at about 20 percent, and declined between 2001 and 2002. In 2002, Blacks made up about 22 percent of enlisted personnel in the armed forces (20 percent of men and 34 percent of women), while Blacks made up 13 percent of civilians aged 18 to 44 (see Figure 4). In 2002, the Black component ranged from 28 percent in the Army and 21 percent in the Navy to 18 percent in the Air Force and 15 percent in the Marine Corps. Blacks are underrepresented in the officer ranks compared with their share of enlisted personnel or the civilian labor force. At the same time, African Americans' share of officers has been increasing, from about 3 percent at the beginning of the volunteer force to about 9 percent in 2002—similar to their share of civilian college graduates (Warner & Asch, 2001). Blacks follow a slightly different path to becoming officers than do Whites. They are less likely than White officers to have been commissioned through the military academies. In 2002, 11 percent of Black officers entered through the academies compared with 16 percent of White officers. Black officers were also more likely than White officers to have been commissioned through ROTC without scholarship support (23 percent of Blacks versus 14 percent of Whites). Blacks were about as likely as Whites to gain their commission through other avenues, including ROTC scholarships, officer candidate schools, or direct commission. Black officers are more likely than Whites to be in the lowest officer ranks (Army second lieutenant to captain and their equivalents in the other services); this racial gap is especially pronounced among naval officers. Black officers are also less likely than White officers to be in career-enhancing tactical operation specialties (25 percent versus 39 percent in fiscal year 2002), and more likely than Whites to be in administration, supply, procurement, and allied occupations (26 percent versus 14 percent for Whites). Black officers are likely to be younger than White officers, in part because the increase in Black officers is relatively recent. Black officers also wait longer for promotions, in part because they are disproportionately in support rather than combat fields in which promotions happen faster. Because Black officers are less likely than Whites to be promoted, they are also more likely to leave the service earlier in an up-or out system, which keeps their average age lower.

## Gender

Military service in most countries and at most times has been a predominantly male occupation. Women have served in the U.S. military throughout its history, but never on an equal basis with men. During the Revolutionary War, women posed as men in order to participate. During the Civil War, women's contributions to military efforts increased as they performed vital support services such as nursing, cooking, and laundering. However, these services were outside the regular structure of the military. Women were first accepted into official roles in the military only in the 20th century. A common historical and cross-national pattern is that women's military roles expand during times of war and tend to contract when the war is over. Women's military roles are also responsive to cultural values about gender and family, but military necessity often takes precedence. The U.S. military employed women in unprecedented numbers in World War I—approximately 34,000 served in uniform. Both the Navy and Marine Corps established women's auxiliary units in which women were granted official military status and assigned to traditionally female jobs such as telephone operators and clerks. Women also served in the Army and Navy Nurse Corps. After the war, the women's units (other than the nursing units) were disbanded.

*Figure 3*

### African American Share of Enlisted Personnel and Officers, by Service, 1973–2002

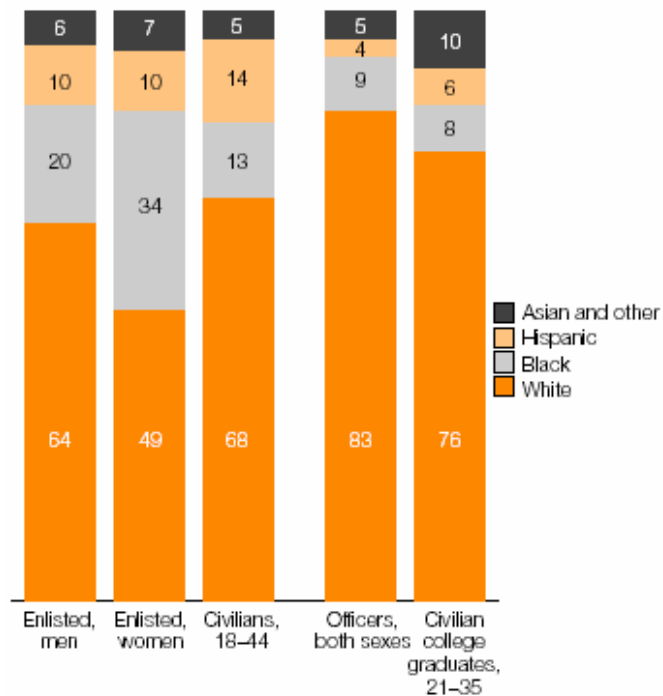


Source: DoD, *Population Representation in the Military Services FY2002* (2004): tables D-17, D-27.

The next large expansion of women's military roles came, not surprisingly, with U.S. involvement in World War II. In 1941, approximately 6,000 women were on active duty and they constituted less than one-half percent of the total forces. By 1945, there were about 265,000 women in uniform, representing 2 percent of the forces (see Figure 5). Women served in larger numbers than ever before and in expanded roles. A similar transformation took place in civilian employment for women during World War II, as more women were employed and more worked in nontraditional jobs. Women served in auxiliary units in all the services and performed both traditionally female jobs, such as health care and administration, and traditionally masculine jobs such as parachute rigger, aircraft mechanic, and weapons instructor. In addition, several hundred women served as WASPs (Women's Airforce Service Pilots). These women, although not granted full military status and benefits until decades after the war, performed the vital and dangerous jobs of ferrying military aircraft to overseas theaters of operations. As before, the end of the war brought a return to legal limitations on women's military roles that constrained their participation for over 40 years. Women's representation remained a little over 1 percent of the force throughout the 1950s and 1960s. The percentage of military personnel who were women began to rise in the 1970s and reached 1.9 percent in 1972, on the eve of the all-volunteer military.

**Figure 4**

**Active Military and Civilians by Race/Ethnicity, 2002**

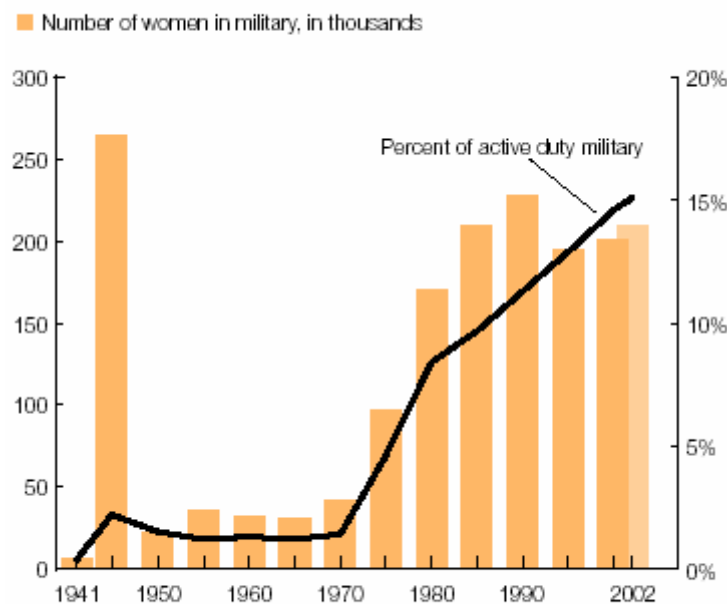


Source: DoD, *Population Representation in the Military Services FY2002* (2004): tables 4.5 and B-24, and page 4-9.

The end of military conscription and the establishment of the all-volunteer force in 1973 brought a dramatic shift in women's military roles. Although the architects of the volunteer force had anticipated an all-male force, the military was forced to rely increasingly on women to meet its personnel needs in the face of shortages of qualified male volunteers. Women's share rose to almost 8.4 percent by 1980. Their representation continued to increase, though more slowly, reaching 15 percent by 2002 (WREI, 2003). The first 30 years of the all-volunteer force, from 1973 to 2003, witnessed an expansion of job opportunities for military women. Legal and regulatory changes eliminated many of the gender-based restrictions on the assignment of women to military jobs and positions. In 1991, Congress repealed the provisions of a 1948 law that prohibited women from flying aircraft on combat missions. Since 1994, women have been allowed to serve on Navy surface combatant ships. However, women are still excluded from military units that engage in direct ground combat. This restriction means that women are legally barred from serving in approximately 20 percent of all military positions (Harrell & Miller, 1997). Occupations and positions that involve direct offensive ground combat remain closed to women. In the Army, the largest branch of the services, women are prohibited from serving in units of battalion size or smaller whose primary mission is ground combat, or with units that are routinely located with combat units. Women are excluded from the occupational fields of infantry, armor, and Special Forces. Also closed to women are units at the battalion level or below in cannon field artillery and multiple launch rocket artillery. Women are also excluded from Ranger units at the regiment level and below, ground surveillance radar platoons, combat engineer line companies, and short-range air defense artillery units (Manning & Wight, 2003). Women are permitted to serve in 91 percent of Army occupational categories, but in only 70 percent of the actual positions. Women make up 15 percent of Army enlisted personnel and officers.

**Figure 5**

**Women in the Military: Number and Share of Military Personnel, 1941–2002**



Source: DoD, *Selected Manpower Statistics, Fiscal Year 2002* ([www.dior.whs.mil/mmmd/M01/fy02/m01fy02.pdf](http://www.dior.whs.mil/mmmd/M01/fy02/m01fy02.pdf), accessed Dec. 6, 2004); tables 2-11 and 2-19; and U.S. Department of Commerce, *Statistical Abstract of the United States, 1955*.

In contrast to the Army, women are permitted to serve in 94 percent of Navy occupations and 91 percent of Navy positions. Women serve on almost all classes of ships; they are excluded from submarines, special forces (SEALS), coastal patrol boats, special boat unit crews, and support positions with Marine Corps ground combat units. Women also may not work as fire control technicians, missile technicians, and sonar technicians (submarine) because these occupations require submarine service. Although theoretically all Navy surface ships (except the restrictions above) are open to women, not all Navy ships can accommodate women because separate berthing areas are not available. Most Navy ships have limited berth capacity for women and can only accommodate women for about 20 percent of the crew. This restriction limits women's chances for sea duty even on ships with a personnel billet open for women. Women constitute 14 percent of Navy enlisted personnel and 15 percent of officers.

The Air Force, which has the smallest proportion of enlisted positions considered direct combat, has few restrictions on women's service: 99 percent of occupations and positions are open to women. Women are excluded from positions that are physically located with ground combat units, such as combat control, tactical air command and control, and pararescue. Restricted assignments include special operations force (SOF) rotary aircraft (helicopters); combat liaison officer assignments with infantry battalions; flight engineer/gunner aboard SOF aircraft, and weather, ground radio control, and radio communications positions that collocate with ground combat units. The Air Force has the largest percentage of women of all the services: Women make up 20 percent of enlisted personnel and 18 percent of officers.

The U.S. Marine Corps, the smallest Department of Defense service, has the largest proportion of ground combat personnel and the greatest restrictions on women's assignments. While women can enter 92 percent of occupations, only 62 percent of positions are open to them. Women are excluded from occupations in infantry, armor, and artillery, as well as from serving as security force guard, close-quarter battle team member, and 15 other occupations that routinely collocate with ground combat units. As with the Army, positions in units below the battalion level are closed. Additionally, eight specialties that are open to women have restricted assignment to certain units. Some Marine Corps positions are closed because they are on Navy ships that may not yet accommodate women. The Marine Corps has the smallest representation of women: 6 percent of both enlisted personnel and officers.

The distribution of jobs that women actually fill is affected by these exclusions, and also by women's preferences and where recruiters steer them. Women's occupational distributions vary by rank. Most women officers are in support jobs, primarily in health care and administrative specialties; together these two occupational areas account for 55 percent of women, compared with only 20 percent of men. Health care and administration account for nearly one-half of enlisted women but less than one fifth of enlisted men. Thus, roughly one-half of women officers and enlisted women are in fields that are not traditional for military women. Nearly 11 percent of women officers are in engineering and maintenance, for example, about the same as for men, and 9 percent are in tactical operations occupations, compared with 42 percent of men. Among enlisted personnel, women are about as likely as men to be in service and supply specialties or communication and intelligence specialties, which are not traditionally



female jobs. Enlisted women's concentration in these nontraditional specialties has increased over time.

The types of jobs held by women officers, relative to male officers, reflect gender differences in how men and women gain officers' commissions. Only about 10 percent of women officers, compared with about 20 percent of men, were commissioned through the military academies; only about 14 percent of women, compared with about 21 percent of men, were commissioned from the enlisted ranks through officer candidate schools or officer training schools (OTS/OCS). Women officers are about as likely as men to have been commissioned through ROTC with scholarships, although women are somewhat less likely than men to have gone through ROTC without scholarship support (11 percent vs. 15 percent). The largest difference is that more than one-third of the women commissioned officers received their commissions through direct appointment, compared with about 13 percent of male officers; these officers serve primarily as health care professionals.

One interesting phenomenon in the military is that Black women have greater representation than Black men. Sixteen percent of female officers and 34 percent of enlisted women are Black compared with 9 percent of male officers and 20 percent of enlisted men. The Army has the highest percentage of Black women: nearly one-fourth of women officers and close to one-half of enlisted women are Black. Many Black women see the military as providing greater opportunities and benefits than the civilian labor market. Some 71 percent of women officers and 48 percent of enlisted women are White. In the Army, only 37 percent of enlisted women are White, meaning that a majority (63 percent) of Army enlisted women are from "minority" racial groups compared with 32 percent of civilians ages 18 to 44. Latinas, in contrast, have a smaller share of the military than of the civilian population, but their share has been growing. In 2002, Hispanic women constituted only 10 percent of enlisted women and 4 percent of female officers, up from 4 percent and 2 percent, respectively, in 1975, but well below their 13 percent of the general population. Hispanic women are nearly 18 percent of enlisted women in the Marine Corps, however.

Despite the historical status of the military as a gender-defining institution (Bourg & Segal, 2001), women have always served in the armed forces and their participation has increased, in numbers, percentages, and types of jobs. These changes reflect changes in civilian society in gender norms and women's roles, as well as the evolution of the nature of the military itself. Further changes—both toward expansion and contraction of women's military participation—are likely to be a function of these factors and the political and social views of those in power.

## **Conclusion**

The history of the U.S. military reflects progressive inclusion of previously excluded groups during periods of need due to wartime mobilization, cohort size, and changes in accession policies. These changes have led to the inclusion of non-English speaking Europeans, African-Americans, Asians, Hispanics, and women. The military participation of these groups has been associated with greater citizenship rights. While most changes have occurred during wartime, the end of conscription in 1973 presaged major expansion of the recruitment pool, reflected in

increases in African-Americans, Hispanics, and women. The mobilization needs associated with current military operations make it unlikely that we will see a contraction of the diversity of groups that make up our armed forces, and indeed we would anticipate further diversification if the force is to be sustained on a voluntary basis, including greater use of civilians and foreign nationals to perform tasks heretofore done by American military personnel.

## References

- Andreski, S. (1968). *Military Organization and Society*. Berkeley, CA: University of California Press.
- Armor, D.J. (1996). Race and Gender in the U.S. Military. *Armed Forces & Society*, 23, 22-39.
- Binkin, M., & Eitelberg, M.J. (1982). *Blacks and the Military*. Washington, DC: Brookings Institution.
- Bogart, L., (Ed.). (1969). *Social Research and the Desegregation of the U.S. Army*. Chicago: Markham.
- Bourg, C., & Segal, M.W. (2001). Gender, sexuality, and the military. In D. Vannoy (Ed.), *Gender Mosaics: Social Perspectives (Original Readings)*. Los Angeles: Roxbury Publishing Company.
- Harrell, M.C., & Miller, L.L. (1997). *New Opportunities for Military Women, Effects Upon Readiness, Cohesion, and Morale*. Santa Monica, CA: RAND.
- Janowitz, M., & Moskos, C.C. (1974). Racial composition in the all-volunteer force. *Armed Forces & Society* 1, 109-23.
- Kestbaum, M. (2000). Citizenship and Compulsory Military Service: The Revolutionary Origins of Conscription in the United States. *Armed Forces & Society* 27, 7-36.
- Manning, L., & Wight, V.R. (2003). *Women in the Military: Where They Stand, 4th ed.* Washington, DC: WREI.
- Moore, B. (2003). *Serving Our Country: Japanese-American Women in the Military During World War II*. New Brunswick, NJ: Rutgers University Press.
- National Research Council. (2003). *Attitudes, Aptitudes, and Aspirations of American Youth: Implications for Military Recruitment*. Washington, DC: National Academies Press.
- Segal, D.R., & Kestnbaum, M. (2003). Professional Closure in the Military Labor Market: A Critique of Pure Cohesion. In D.M. Snider & G.L. Watkins (Eds.), *The Future of the Army Profession*. New York: McGraw-Hill.
- Segal, D.R., & Segal, M.W. (2004). America's Military Population. *Population Bulletin*, 59.
- Segal, D.R., & Segal, M.W. (1991). Demographics of the Total Force: Quantity, Quality, and Training. In R.L. Pfaltzgraff, Jr., & R. Shultz, Jr. (Eds.), *The United States Army: Challenges and Missions in the 1990s*. Lexington, KY: D.C. Heath.
- Segal, D.R., & Verdugo, N. (1994). Demographic trends and personnel policies as determinants of the racial composition of the volunteer army," *Armed Forces & Society* 20, 619-32.
- United States Bureau of the Census. 1999. *Nativity of the Population and Place of Birth of the*

*Native Population: 1850 to 1990, table 1.* Prepared by the Bureau of the Census. Washington: The Bureau. Accessed online at: [www.census.gov/population/documentation/wps0029/tab01.html](http://www.census.gov/population/documentation/wps0029/tab01.html), on Nov. 15, 2005.

Warner, J.T., & Asch, B.J. (2001). The record and prospects of the all-volunteer military in the United States. *Journal of Economic Perspectives* 15, 169-92.

Women's Research and Education Institute (WREI). (2003). Active duty service personnel by branch of service, officer/enlisted status and sex as of 30 September 2003. Washington, DC: WREI.

Propensity to Serve and Motivations to Enlist among White, Black,  
and Hispanic American Combat Soldiers

Ryan Kelty    David R. Segal  
University of Maryland

Todd Woodruff  
United States Military Academy

**Abstract**

Propensity to serve in the military expressed by high school seniors has been shown to be a strong predictor of actual service. However, propensity to serve has been declining among American youth, and there are not sufficient high propensity youth to meet recruiting needs, so low-propensity youth have to be recruited as well. We explore the relationship between propensity to serve and motivation to enlist by race/ethnicity (White, Black, and Hispanic) in a sample of enlisted combat soldiers in the U.S. Army. Examination of the racial groups by low versus high propensity revealed similarities across racial groups, but also important differences.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## Propensity to Serve and Motivations to Enlist among White, Black, and Hispanic American Combat Soldiers

Ryan Kelty    David R. Segal  
University of Maryland

Todd Woodruff  
United States Military Academy

Propensity to serve in the military after graduation expressed by high school seniors has been shown to be a strong predictor of actual service (Bachman et al., 1998). Among male high school seniors, 70% of those who express a high desire or likelihood of serving actually enter the military within six years of high school graduation. When propensity to serve is included in models of enlistment, other variables tend to be rendered statistically insignificant, with propensity accounting for most of the explained variance (Bachman et al., 2000).

The propensity of American youth to serve in the military has been declining for more than two decades (Segal et al., 1999). There are not sufficient numbers of high propensity youth to provide the two-hundred thousand to two-hundred fifty thousand new personnel needed by the armed forces each year (Orvis, Sastry, & McDonald, 1996). Thus, significant numbers of young men and women who did not, as high school students, expect or desire to serve in the military must be recruited.

What do we know about the attitudes and values of high propensity versus low propensity youth that might be consequential for a force recruited from both populations? In attempting to predict propensity in the youth population, the Committee on Youth Population and Military Recruitment of the National Research Council (NRC Committee) found that the importance of a dimension they labeled "Patriotic Adventure," which included items such as an opportunity for adventure, physical challenge, doing something for the country, and doing something to be proud of, was a more powerful determinant of propensity than was the importance of "External Incentives" such as money for education, good pay, and job security (Sackett & Mavor, 2003: 202-212). These dimensions are similar to the models of *institutional* versus *occupational* military service suggested by Charles C. Moskos after the advent of the all-volunteer (or all-recruited) military force in the 1970s.

### **Moskos's Institutional and Occupational Models**

Moskos's (1977: 44) initial formulation of the institutional versus the occupational model asserted the key claim that "the overarching trend within the contemporary military is the erosion of the institutional format and the ascendancy of the occupational model." The institutional versus occupational model proposed by Moskos and his colleagues (1977; 1988) focuses on changes in service members' values and norms and how such changes affect the structure, composition and mission of the armed forces.

Moskos (1977) characterized the U.S. armed forces until approximately 1970 as an institutional military (see Segal, 1989). The institutional military is one in which soldiers serve in response to a call to duty and honor (Moskos, 1977). Compensation is largely in-kind, rather than remunerative. Numerous authors have identified a moral motivation, reflected in concepts such as duty and honor, as fundamental to an institutionally oriented military (Cotton, 1988; Hulin et al., 1985; Janowitz, 1960; Moskos, 1977; Reed & Segal, 2000). Traditional values and norms are paramount in manning the armed forces in an institutional military, shaping the service members into a distinct and cohesive group (Moskos, 1977). By fostering internalization of these values by their constituent members, the military is able to elicit performance and dedication above what might otherwise be expected (Moskos & Wood, 1988). This internal motivation facilitates pride in service members' professional conduct, and in the profession at large.

In contrast to the institutional military, Moskos (1977) identifies the occupational military as one in which the free market dominates the organization and its members. A primary characteristic of occupational organizations is self-interest. Another important characteristic of an occupationally oriented organization is the external motivations of individuals, especially in the form of monetary compensation. These occupational qualities run counter to the institutional model's emphasis on the collective group's benefit as expressed via values, norms, and internal motivation. One of the dimensions of debate on the institutional and occupational model has been whether educational incentives for military service are an in-kind compensation, or constitute economic remuneration.

Moskos (1977; 1988) presents these two orientations as polar ends of a single continuum. Pure forms of one orientation or the other are viewed only as ideal types, not as realistic potentials. Moskos and Wood (1988) explicitly recognize that through the course of history the American military's orientation may become more institutional or more occupational, but aspects of both will always be present. By contrast, Segal (1986) suggests that they may be separate dimensions, so that a pragmatic military professional may be motivated by ideals of patriotism and honor while simultaneously being concerned with the financial well-being of himself and his family. Segal et al. (2001) also argue that the importance of patriotic motivations to serve in the volunteer military has been underestimated.

Recent analysis of enlistment motivations and propensity to serve among U.S. Army combat soldiers suggests that the institutional and occupational models that have been central to the research agenda of military sociology for three decades do not capture the complexity of motivations to serve (Woodruff et al., forthcoming). Factor analysis of these enlistment motivation items (see Woodruff et al., forthcoming) identified four factors: institutional, future-oriented, occupational, and pecuniary. The first and third of these reflect elements of Moskos's models. The other two factors, however, present a more complex picture, and suggest, in particular, that educational benefits are a component of neither the institutional nor occupational models, but rather reflect an individual's plans about what life-course trajectory (i.e., military versus civilian career) he or she is likely to follow. Since the armed forces have come to recognize that for the quality personnel they seek, their competition for manpower is not entry-level civilian employment, but rather colleges and universities, the role of educational benefits is particularly important (Bachman et al., 2001).

A second finding of Woodruff et al. (forthcoming) indicates that high propensity soldiers are strongly influenced by patriotic motives and by their plans for the future, potentially including military careers. Further, these two factors are also powerful influences on the enlistment of low propensity soldiers, but for this group they are negatively associated with motivations for joining the service. Conversely, low propensity soldiers seem more responsive to occupational and pecuniary motivations. Finally, the effects of occupational and pecuniary motivations for enlistment are not significantly different between high propensity and low propensity soldiers, supporting the characterization of the former as pragmatic professionals.

In this paper we examine the relationship between the four enlistment motivation factors identified by Woodruff et al. and propensity to serve by racial group (White, Black, and Hispanic), using data from a survey of soldiers in two infantry units in the U.S. Army.

## Method

### Sample

Our sample for addressing these issues was drawn from two infantry battalions who were surveyed at Fort Lewis, Washington in 2002, and consists of first-term enlisted soldiers. Approximately 300 paper and pencil surveys were distributed, of which 293 were returned completed. Of the returned surveys, 257 were used for analysis: seven were removed because they were from officers and did not represent an adequate sample of officers for analysis, and 29 were excluded because the surveys were incomplete. This sample had a mean age of 21.5 years, with Black soldiers having the highest mean age at 23.0 years. As Table 1 shows, the modal respondent was a single high school graduate who had been in the Army for approximately two years, with a third having some higher education. Approximately two-thirds of the White (65.8%) and Hispanic (67.5%) soldiers were at the rank of private first-class or below, while Black soldiers had a slightly lower proportion at these ranks (55.6%).

Table 1. Descriptive Statistics of Soldiers by Race

	White Soldiers		Black Soldiers		Hispanic Soldiers	
	Percent	Mean	Percent	Mean	Percent	Mean
Age	...	21.25	...	23.0	...	20.92
Years in Service	...	1.85	...	2.06	...	1.68
Education						
Non HS graduate	12.7	...	5.6	...	8.1	...
HS graduate	50.3	...	61.1	...	70.3	...
Some College	35.4	...	22.2	...	18.9	...
4-year degree	1.7	...	5.6	...	2.7	...
some grad school	0.0	...	0.0	...	0.0	...
graduate degree	0.0	...	5.6	...	0.0	...
Marital Status*						
single	84.5	...	77.8	...	73.0	...
married	13.8	...	16.7	...	27.0	...
divorced	1.7	...	5.6	...	0.0	...



Rank						
Private/E1	8.8	...	5.6	...	21.6	...
Private 2/E2	28.7	...	11.1	...	32.4	...
Private First Class/E3	28.2	...	38.9	...	13.5	...
Specialist/E4	32.0	...	44.4	...	29.7	...
Sergeant/E5	2.2	...	0.0	...	2.7	...
*at time of enlistment	N = 181		N = 18		N = 37	

This sample represents every first-term soldier who was present during the day the survey was administered. While this sample was not randomly selected, it is believed to be representative of the first-term soldier population from both battalions. The sample contains soldiers with various occupational specialties, but is largely comprised of soldiers with infantry occupational specialties, a reflection of the battalions' mission of close proximity ground combat with light and medium weapons. The exclusion of women from the sample is a product of the Army's policy of exclusion of women from ground combat units. The sample is racially diverse (though it under-represents Blacks relative to the Army enlisted population because Blacks tend to enlist in non-combat support specialties), and varies in educational and family background. While the sample does include some married, divorced, and single soldiers, as well as soldiers with and without children, first-term soldiers are more likely to be young, unmarried and without children than the Army population as a whole.

### Measures

Propensity to serve was measured retrospectively by asking respondents to indicate what their aspirations had been for the period immediately following their graduation from high school. They were given five response alternatives representing the range of general trajectories among which high school graduates choose: join the military or attend a service academy, attend college, attend college and then join the military, find non-military employment, and no plans. For analysis, these five categories were collapsed to two: plans for the military (join military or service academy, and attend college and then join the military), and no plans for the military (attend college, find non-military employment, and no plans). Table 2 presents frequency distributions for late adolescent plans for military service immediately following high school.

Table 2. Late Adolescent Plans for Military Service by Race

	White Soldiers	Black Soldiers	Hispanic Soldiers
	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)
No Plans for military service	125 (69.1)	13 (72.2)	26 (70.3)
Plans for military service	56 (30.9)	5 (27.8)	11 (29.7)

## Propensity to Serve

Total	181	18	37
	(100.0)	(100.0)	(100.0)

---

As Table 2 indicates, a large majority (approximately 70.0%) of each racial group of the first-term soldiers surveyed had not planned to join the military in their later adolescent years. Obviously, the Army has been recruiting low propensity soldiers.

Motivation to serve was measured by an item asking respondents to identify all motivations that contributed to their decision to join the Army from a list of 15 items. Table 3 presents the data on the motivations to serve.

It is clear that the kinds of issues that the National Research Council Committee labeled “Patriotic Adventure” and that helped define Moskos’s institutional model weighed heavily in the motivations of these soldiers: desire to serve the country, patriotism, adventure, and desire to be a soldier. Fewer than half of the White and Black soldiers, and just over fifty percent of the Hispanic soldiers mentioned the desire to be a soldier as a motivation for enlistment. Desire for a military career was chosen by only one out of five White and Hispanic soldiers, with Blacks slightly identifying this motivation slightly less frequently (16.7%). These figures are consistent with the low percentage of soldiers reporting prior propensity to serve.

Economic issues consistent with Moskos’s occupational model or the NRC Committee’s “External Incentives” were less important: lack of better employment options, best job available, enlistment bonus, and need to support a family. Hispanic soldiers identified the need to support a family and crisis (e.g., loss of job, divorce) in much higher proportions than did White and Black soldiers, though the proportion of Hispanics identifying these motivations was less than one third.

Table 3. Frequency Distribution of Motivations to Serve by Race

	Yes		
	White Soldiers	Black Soldiers	Hispanic Soldiers
	<i>f</i> (%)	<i>f</i> (%)	<i>f</i> (%)
Serve country	120 (66.3)	11 (61.1)	20 (54.1)
Patriotism	105 (58.0)	8 (44.4)	17 (45.9)
Adventure/challenge	134 (74.0)	10 (55.6)	30 (81.1)
Desire to be a soldier	84 (46.4)	8 (44.4)	19 (51.4)
Desire military career	37 (20.4)	3 (16.7)	8 (21.6)
Money for college	112 (61.9)	13 (72.2)	23 (62.2)
Money to repay student loan	8 (4.4)	2 (11.1)	3 (8.1)
Entry bonus	63 (34.8)	8 (44.4)	15 (40.5)
Support family	25 (13.8)	4 (22.2)	12 (32.4)
Crisis	15 (8.3)	2 (11.1)	6 (16.2)
Lack of better options	42 (23.2)	4 (22.2)	9 (24.3)
Best employment available	21 (11.6)	3 (16.7)	8 (21.6)
	N = 181	N = 18	N = 37

Lastly, money for college was cited as frequently as institutional incentives, while money to repay student loans was rarely identified. This discrepancy is likely an artifact of the sample. Only about a third of our respondents had completed any college education, therefore most were not in the position to have been motivated to join by a loan repayment incentive. Three decades after the advent of the volunteer force, the major motivations of these infantrymen appear to still be institutional.

## Results

To determine the relationship of the four enlistment motivation factors to propensity to serve, retrospective propensity was regressed on the four enlistment motivation factors. Results of this analysis are presented in Table 4.

Results of the regression analysis including all four motivation factors produced a model that explained a significant amount of variance in propensity to serve for the White ( $R^2 = .131$ ) and Black soldier ( $R^2 = .619$ ) groups. This model fit the Black soldier group best. The model

failed to explain a significant amount of variance for the Hispanic group ( $R^2 = .090$ ). Of the four enlistment motivation factors included in the White and Black soldier models, only the institutional and future-oriented factors were significant predictors of propensity ( $P < .001$  and  $P < .01$  respectively), with the institutional factor being the most powerful in both groups. This finding for White and Black soldiers is consistent with the findings of Woodruff et al. (forthcoming), and indicates that although the number of factors influencing propensity to serve is larger than suggested by prior models, not all contribute significantly to individuals' propensity to serve. The lack of significance for the Hispanic group may be a result of heterogeneity of people comprising this group as compared to the White and Black groups.

Table 4. Enlistment Motivations Regressed on Propensity to Serve by Race

	White Soldiers	Black Soldiers	Hispanic Soldiers
	$\beta$	$\beta$	$\beta$
Institutional Factor	.311***	.605***	.221
Future-Oriented Factor	.216**	.559**	.345 <sup>†</sup>
Occupational Factor	-.045	-.169	.230
Pecuniary Factor	-.067	-.216	-.299
	Adj. $R^2 = .131$	Adj. $R^2 = .619$	Adj. $R^2 = .090$
	$F = 7.761$ ***	$F = 7.907$ **	$F = 1.892$
	$df = 180$	$df = 17$	$df = 36$

<sup>†</sup>  $P < .10$

\*  $P < .05$

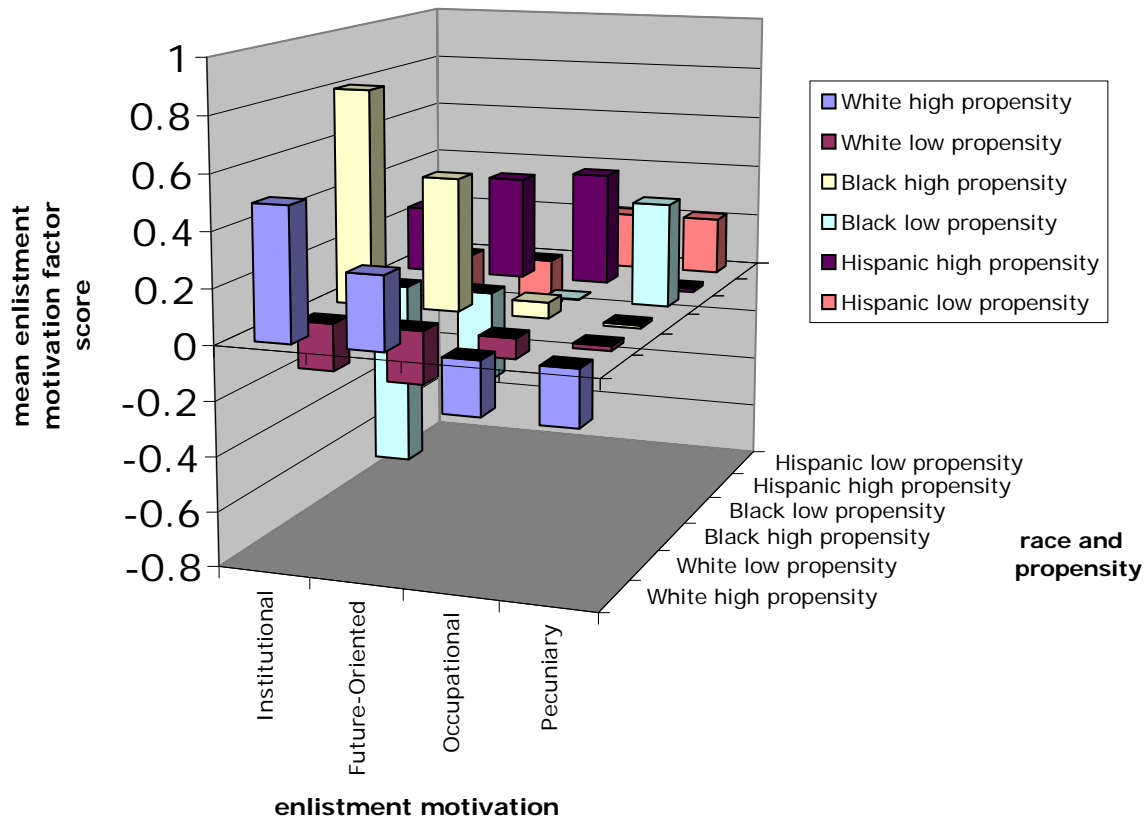
\*\*  $P < .01$

\*\*\*  $P < .001$

Comparing enlistment motivation factors between low and high propensity status reveals that among White and Black soldiers high versus low propensity groups have clear differences in terms of enlistment motivations, but among Hispanic soldiers' propensity status fails to produce significant differences by enlistment motivation (Figure 1). White and Black soldiers with high propensity to serve are significantly more likely to express institutional enlistment motivations ( $P < .001$  and  $P < .01$  respectively) and future-oriented enlistment motivations ( $P < .01$  and  $P < .05$ , respectively) than those with low propensity to serve. One interpretation of this finding is that the G.I. Bill college tuition assistance incentive is a major motivation to enlist among high propensity individuals within our sample, but not among those with low propensity. Alternatively, it could simply reflect the truism that those who plan on military careers express a high propensity to serve.

Occupational enlistment motivations are observed to be slightly positive and essentially similar for high and low propensity Black soldiers. Black and Hispanic soldiers expressing low propensity to serve identify pecuniary motivations for enlisting, whereas those with high propensity do not show the same pattern. Hispanic soldiers of both high and low propensity

**Figure 1. Enlistment Motivation by Propensity to Serve and Race**



demonstrate a clear enlistment motivation trend based on occupational factors; a noted difference from White and Black soldiers. Regardless of propensity status, White soldiers do *not* report being motivated to enlist by occupational and pecuniary factors; a contrary pattern to their Black and Hispanic peers. Differences in mean occupational and pecuniary factor scores observed between high versus low propensity soldiers failed to reach significance for all racial groups.

### Conclusions

Our analyses lead us to a number of findings which, given the limited nature of our sample should be regarded as heuristic, and serve as a basis for further research. First, our data show that approximately 70% of White, Black, and Hispanic enlisted soldiers had low propensity to serve coming out of high school. This extends our knowledge by establishing that the Army is recruiting approximately equivalent percentages of low propensity individuals in each racial group.

Second, though the three racial groups included in this study have some similarities with regard to enlistment motivation, there are also important differences. Each of the racial groups studied demonstrated strong institutional motivations for enlisting. Upwards of two thirds of the soldiers in each racial group claimed to be motivated to enlist by the incentive to receive money for college through the G.I. Bill. Hispanic soldiers identified being motivated to enlist by the need to support family and crises (e.g., loss of job, divorce) in much higher proportions than did White and Black soldiers, though the proportion of Hispanics identifying these motivations was less than one third.

Third, regression analysis using enlistment motivations to predict propensity produced a model that explained a significant amount of variance in propensity to serve for the White and Black soldiers, but not for Hispanic soldiers. This model fits the Black soldiers best.

Fourth, while there were similarities in factors motivating enlistment by propensity status and race, key differences were also observed. High propensity soldiers in each racial group are significantly more likely to express institutional and future-oriented motivations to enlist than their low propensity peers ( $P < .001$ ). Low propensity Black and Hispanic soldiers appear to be motivated to enlist by pecuniary factors, whereas white soldiers are not.

Finally, both high and low propensity Hispanic soldiers indicate a clear occupational motivation for enlisting, whereas neither high nor low propensity White soldiers indicate occupational motivations for their enlistment.

Future research should focus on obtaining data from a more broadly representative sample of soldiers (combat and support components) to examine whether the findings from this study are truly generalizable to the population. It would also be profitable to fine tune the Hispanic category given its heterogeneous composition.

## References

- Bachman, J. G., Freedman-Doan, P. & O'Malley, P. M. (2001). Should U.S. military recruiters write off the college-bound? *Armed Forces & Society*, 27 (3), 461-476.
- Bachman, J. G., Segal, D.R., Freedman-Doan, P., & O'Malley, P. M. (2000). Who chooses military service? Correlates of propensity and enlistment in the U.S. armed forces. *Military Psychology*, 12, 1-30.
- Bachman, J. G., Segal, D. R., Freedman-Doan, P., & O'Malley, P. M. (1998). Does enlistment propensity predict accession? High school seniors' plans and subsequent behavior." *Armed Forces & Society*, 25, 59-80.
- Cotton, C. A. (1988). The Institutional Organizational Model and the Military. Pp. 39-56 in C. Moskos & F. R. Wood (Eds.) *The Military: More than Just a Job?* New York: Pergamon-Brassey's International Defense Publishers, Inc.
- Hulin, C.L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and integration." *Journal of Applied Psychology*, 97(2), 233-250.
- Orvis, B., Sastry, N., and McDonald, L.L. (1966). *Military Recruiting Outlook: Recent Trends in Enlistment Propensity and Conversion of Potential Enlistment Supply*. Santa Monica, CA: RAND Corporation.
- Janowitz, M. (1960). *The Professional Soldier*. New York: The Free Press.
- Moskos, C. C. (1977). "From institution to occupation: Trends in military organization." *Armed Forces & Society*, 4, 41-50.
- Moskos, C. C. (1988). "Institutional and Occupational Trends in Armed Forces." Pp.15-26 in C. C. Moskos & F. R. Wood (eds.) *The Military: More than Just a Job?* New York: Pergamon-Brassey's International Defense Publishers, Inc.
- Moskos, C. C. & Wood, F. R. (1988). "Introduction." Pp. 3-14 in C. C. Moskos & F. R. Wood (eds.) *The Military: More than Just a Job?* New York: Pergamon-Brassey's International Defense Publishers, Inc.
- Reed, B. J. & Segal, D. R. (2000). "The impact of multiple deployments on soldiers' Peacekeeping attitudes, morale, and retention." *Armed Forces & Society*, 27(1), 57-78.
- Sackett, P., & Mavor, A., editors. (2002). *Attitudes, Aptitudes, and Aspirations of American Youth: Implications for Military Recruitment*. Washington, DC: The National Academies Press.

- Segal, D. R. (1986). "Measuring the institutional/occupational change thesis." *Armed Forces & Society*, 12(3), 351-376.
- Segal, D. R. (1989). *Recruiting for Uncle Sam*. Lawrence, KS: University Press of Kansas.
- Segal, D. R., Freedman-Doan, P., Bachman, J. G., & O'Malley, P. M. (2001).  
"Attitudes of Entry-Level Enlisted Personnel: Pro-Military and Politically Mainstreamed."  
Pp. 163-212 in P. D. Feaver & R. H. Kohn (Eds.) *Soldiers and Civilians: The Civil-Military Gap and American National Security*. Cambridge, MA: MIT Press.
- Segal, D. R., Bachman, J. G., Freedman-Doan, P., & O'Malley, P. M. (1999).  
"Propensity to serve in the U.S. military: Temporal trends and subgroup differences."  
*Armed Forces & Society*, 25, 407-427.
- Woodruff, T., Kelty, R., & Segal, D. R. (forthcoming). Propensity to serve and motivation to enlist among American combat soldiers.



Slide 1

## ***Is Iraq a Class War?***

by

Morten G. Ender,  
Remi Hajjar & Todd Woodruff  
*United States Military Academy*

Slide 2

## **Agenda**

- **Background**
- **Methods**
- **Findings**
- **Questions**

Slide 3

## Background

- ❑ Operation Iraqi Freedom in 2<sup>nd</sup> year
- ❑ As of September 27, 2004, 1,049 U.S. deaths including three civilians
- ❑ Countless Iraq civilians and service members have died as well.
- ❑ Rhetoric in popular press around privilege
- ❑ **Class Bias Thesis**
- ❑ Support for the thesis has been mixed
- ❑ Post-Vietnam focuses on race
- ❑ Moskos & Butler *All You Can Be*
- ❑ Brian Gifford's forthcoming in AF&S

Slide 4

Worldwide U.S. Military Deaths by Principal Wars and Military Engagements Other than War, 1775-1996

War/Conflict/Operation/Incident	Total Deaths <sup>b</sup>
Revolutionary War (1775-1983)	4,435
War of 1812 (1812-1815)	2,260
Mexican War (1846-1848)	13,283
Civil War (1861-1865 representing Union Forces Only)	364,511
Spanish-American War (1898-1902)	2,446
World War I (1917-1918)	116,516
World War II (1941-1946)	405,399
Korean War (1950-1953)	36,516
Vietnam Conflict (1964-1973)	58,198
Iranian Hostage Rescue Mission (April 25, 1980)	8
Lebanon Peacekeeping (1982-1984)	265
Urgent Fury, Grenada (1983)	19
Gander, Newfoundland air crash disaster (1985 soldiers returning from a peacekeeping mission in the Sinai)	248
Just Cause, Panama (1989)	23
Desert Shield/Storm, Persian Gulf War (1990-1991)	383
Restore Hope, Somalia (1992 - 1994)	43
Uphold Democracy, Haiti (1994-1996)	4
Total	1,004,557

a Date reproduced for Department of Defense sources (Washington Headquarters Services, 2002).  
b Includes both hostile and non-hostile deaths.

Slide 5

## Methods

We will analyze casualty data from March 1, 2003 through September 1, 2004 (N=977) along socio-demographic lines to include race, rank, cause of death, location, unit, age, branch and other socio-demographic data.

Slide 6

## Ages of Casualties (N=977)

- ❑ Iraq: overall mean age = 26.37
- ❑ Gulf War: overall mean age = 26.7
- ❑ Vietnam: overall mean age = 22.6

- ❑ 19 = popular modal death age from the Vietnam War
- ❑ 20 = actual modal age
- ❑ 20 = modal death in Iraq (followed by 21)

- |   |   |
|---|---|
| ❑ Active Duty (n= 795)  | ❑ Reserve/National Guard (n=192)                                |
| ❑ Mean age is 25.41   | ❑ Mean age is 30.6.   |
| ❑ Range in age from 18 to 50                                    | ❑ Range from 18 to 59   |
| ❑ Range of 32 years   | ❑ Range of 41 years   |
| ❑ Median death age is 24  | ❑ Median age for this group 29                                  |
| ❑ 27 are 40 and older making up 3.5% of all active duty deaths. | ❑ 36 service members 40 or older making up 18.5% of this group. |

Slide 7

Branches of U.S. Armed Forces and Casualty Rates	
<input type="checkbox"/> USMC	<input type="checkbox"/> U.S. Army
<input type="checkbox"/> 10.3% of total force	<input type="checkbox"/> 44.9% of total force
<input type="checkbox"/> 24.3% of U.S. casualties	<input type="checkbox"/> 72.4% of U.S. casualties
<input type="checkbox"/> U.S. Navy	<input type="checkbox"/> U.S. Air Force
<input type="checkbox"/> 20.4% of total force	<input type="checkbox"/> 22.5% of total force
<input type="checkbox"/> 2.1% of U.S. casualties	<input type="checkbox"/> 1.2% of U.S. casualties

Slide 8

Branches of U.S. Armed Forces and Casualty Rates N=977	
<input type="checkbox"/> U.S. Active Duty	= 53.14% of total force
<input type="checkbox"/> U.S. Active Duty	= 81.4% of casualties
<input type="checkbox"/> U.S. Reservists	= 45.5% of total force
<input type="checkbox"/> U.S. Reservists	= 7.6% of casualties
<input type="checkbox"/> U.S. National Guard	= 1.36% of total force
<input type="checkbox"/> U.S. National Guard	= 11.1% of casualties
<input type="checkbox"/> U.S. Dept of Defense Civilians	= 3 deaths

Slide 9

### Race

- ❑ Race Synopsis from a similar study
  - ❑ Hispanics: 8.6% of total force
  - ❑ Hispanics in U.S. Army and USMA: 10.7%
  - ❑ Hispanic service members during the *war stage* 15.9% of all U.S.
  - ❑ Hispanic service members during the *occupation stage* = 9.9%
  - ❑ Why in combat units disproportionately?
  - ❑ Less social capital; lower Army entrance scores

Slide 10

### Gender: Female Deaths in Iraq (n=24)

- ❑ Overall
  - F = 24 = 2.5% of deaths / 15% of the U.S. military
  - M = 953 = 97.5% of deaths
- ❑ Hostile vs. Non hostile:
  - ❑ 67% vs. 33% // 75% and 25% for men
  - ❑ Hostile deaths:
    - ❑ 9 = Improvised Explosive Devices (IEDs)
    - ❑ 4 = helicopters being shot down
    - ❑ 3 = small arms or mortars
  - 16 hostile deaths:
    - ❑ 11 = service and support functions (maintenance, ordinance)
    - ❑ 4 = combat support (MPs, aviation, civil affairs)
    - ❑ 1 = JAG

Slide 11

**Gender:**  
**Female Deaths in Iraq (n=24)**

- ❑ **Hostile vs. Non hostile:**
- ❑ **Service & Component:**
  - ❑ 96% = Army / 4% Navy (1 Navy and 0 Marines)
  - ❑ 73% = Army / 24% Marines for men
- ❑ **Race:**
  - ❑ Female Deaths: 44% = White; 35% = Hispanic, and 17% = Black
  - ❑ Female Army: 41% = White; 11% = Hispanic, and 40% = Black
- ❑ **Age:** Similar to the age of men (both close to 26 years)
- ❑ **Rank:** Distribution for women is similar to the men

Slide 12

**Rank**

- ❑ **Active Component Deaths by Rank**
  - ❑ Officers: 9% = deaths vs. 15% = total U.S. forces
  - ❑ Warrant Officers: 3% = vs. 1%
  - ❑ NCO: 31% = vs. 39%
  - ❑ Junior Enlisted: 57% = vs. 45%
  - ❑ **Junior enlisted soldiers are over represented in deaths.**
- ❑ **Reserve & National Guard Deaths by Rank**
  - ❑ Officers: 11% = deaths vs. 14% = total U.S. forces
  - ❑ Warrant Officers: 2% = vs. 1%
  - ❑ NCOs: 48% = vs. 43%
  - ❑ Junior Enlisted: 39% = vs. 42%
  - ❑ **Trend reversed for the Reserves/NG, NCOs are overrepresented in deaths**

Slide 13


U.S. Military Ranks by Hostile vs. Non-Hostile Deaths in Iraq					
	Ranks				Total
	Officers	Warrant Officers	Senior NCOs (E5-E8)	Junior Enlisted (E1-E4)	
Hostile	74	15	257	383	729
	81.3%	55.6%	76.0%	73.7%	74.7%
Non-Hostile	17	12	81	137	247
	18.7%	44.4%	24.0%	26.3%	25.3%
Total	91	27	338	520	976
	100.0%	100.0%	100.0%	100.0%	100.0%

Slide 14

Questions

Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.


Slide 1



## Employment Equity and the Canadian Forces

**Major Robert Soucy**  
Directorate Military Gender  
Integration and Employment Equity

**Chief Warrant Officer Kevin Junor**  
Defence Visible Minority  
Advisory Group Mil Co-Chair

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


1

Slide 2



## Aim/But


- To brief on Canadian Human Rights Act and employment equity issues

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

2




Slide 3



## Outline

- Introduction
- Canadian Human Rights Act
- Employment Equity in the CF

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

3

Slide 4



## Social Legislation

- 1948: UN Charter
- 1969: Bilingualism Act
- 1978: Canadian Human Rights Act
- 1982: Constitution
- 1982: Charter of Rights and Freedoms
- 1986: Employment Equity Act
- 1988: Multiculturalism Act
- 1996: Amended EE Act, CF named as "employer"

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

4

Slide 5



## Human Rights and Employment Equity in the CF

- ADM HR Mil is tasked with Human Rights and EE
- Mission - To maximize the Human Resources potential of the Canadian Forces through education and the application of Human Rights and Employment Equity legislation via policies, programs and processes aimed at effectively supporting the defence mission and CF operations.

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

5

Slide 6



## The Canadian Charter of Rights and Freedoms

- Equality for all
- Rights and Freedoms
- Amelioration of conditions of disadvantaged groups

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


6

Slide 7




## Canadian Human Rights Act

- Prohibited Grounds of Discrimination
- BFORs
- Duty to Accommodate
- Universality of Service

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


7

Slide 8




## Prohibited Grounds

- Race
- National or ethnic origin
- Color
- Religion
- Age
- Sex
- Sexual orientation
- Marital status
- Family status
- Disability
- Conviction for which a pardon has been granted

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


8

Slide 9




## Bone Fide Occupational Requirements

- **Meiorin (Three-step test):**
  - rationally connected
  - adopted in honest and good faith
  - reasonably necessary; impossible to accommodate individuals without imposing undue hardship
- Onus is on the CF to demonstrate why a particular standard is a BFOR

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


9

Slide 10



## Policy Initiatives

- Duty to Accommodate
- Religious Accommodation
- Family Status
- Freedom of Association
- Restriction on Duty
- Harassment policy, training and tracking
- Conscientious Objection
- Racist Conduct
- Political Activity – CF Members
- Same-sex union

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

10



Slide 11




## EE Legislation –

- Designed to eliminate discrimination or barriers and open the competition for employment and advancement opportunities to those who might otherwise be excluded
- Identifies Designated Groups as: Visible Minorities, Aboriginal persons, Women, and Persons with Disabilities.

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


11

Slide 12




## EE Does Not apply to...

- Bona Fide Occupational Requirements
  - operational effectiveness
  - health
  - safety
- Standards must be
  - clearly tied to the requirement
  - will not be lowered to "improve" EE standing of the organization

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


12

Slide 13



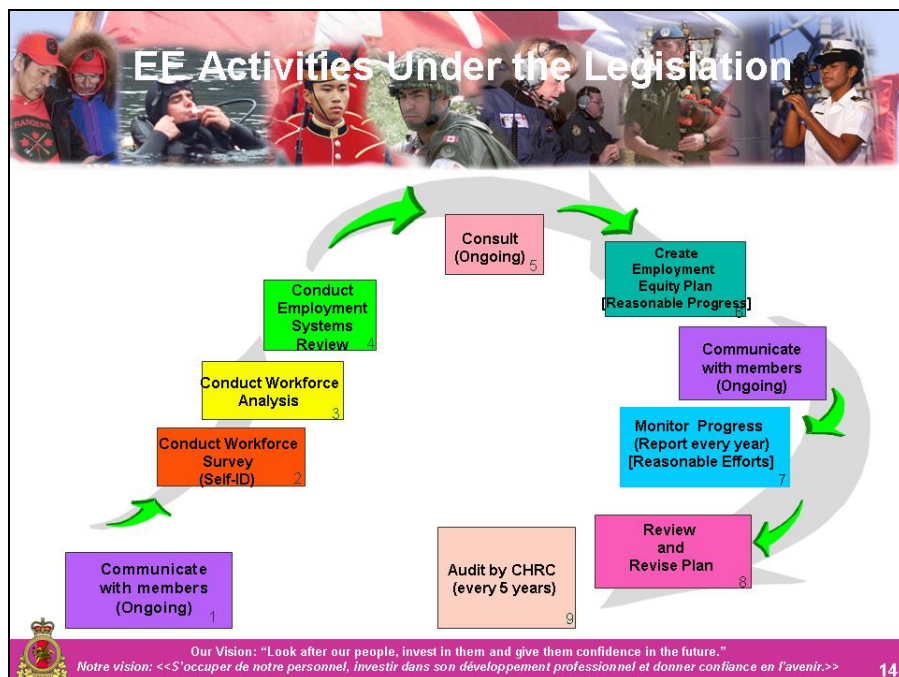
## EE in the CF

- Work towards a CF which reflects the representation of designated groups in the Canadian workforce
- Foster equitable participation of all designated group members in the CF
- Develop a supportive environment
- Show commitment and leadership in EE



 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
 Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

13

Slide 14




Slide 15



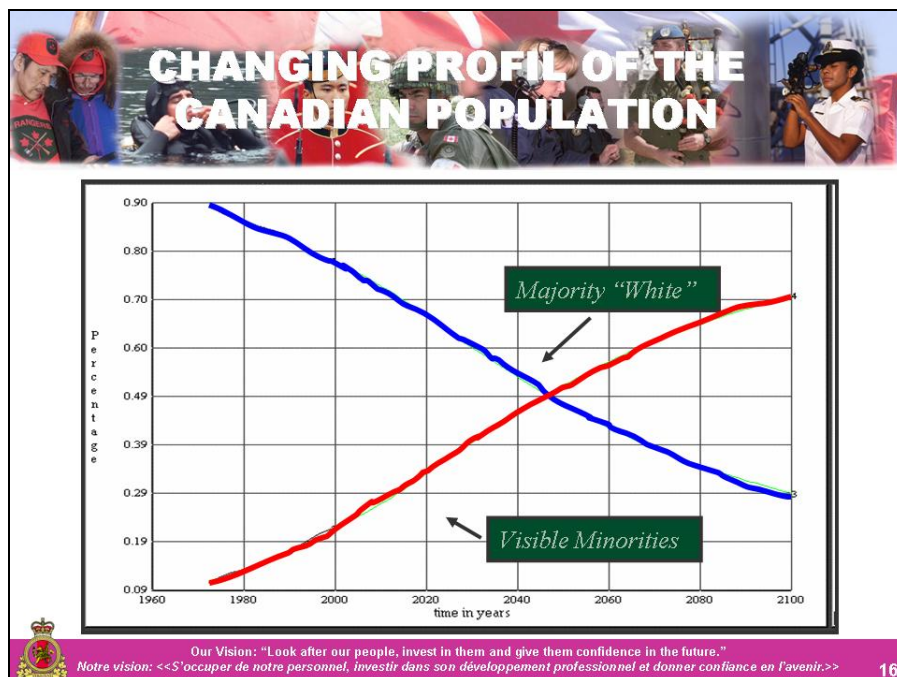
## Current Activities

- CF Self-ID Census
- Workforce Analysis
- Employment Systems Review
- CHRC Audit
- Programmes, Trg & Education, Workshop, Comms & Consultation, Advice

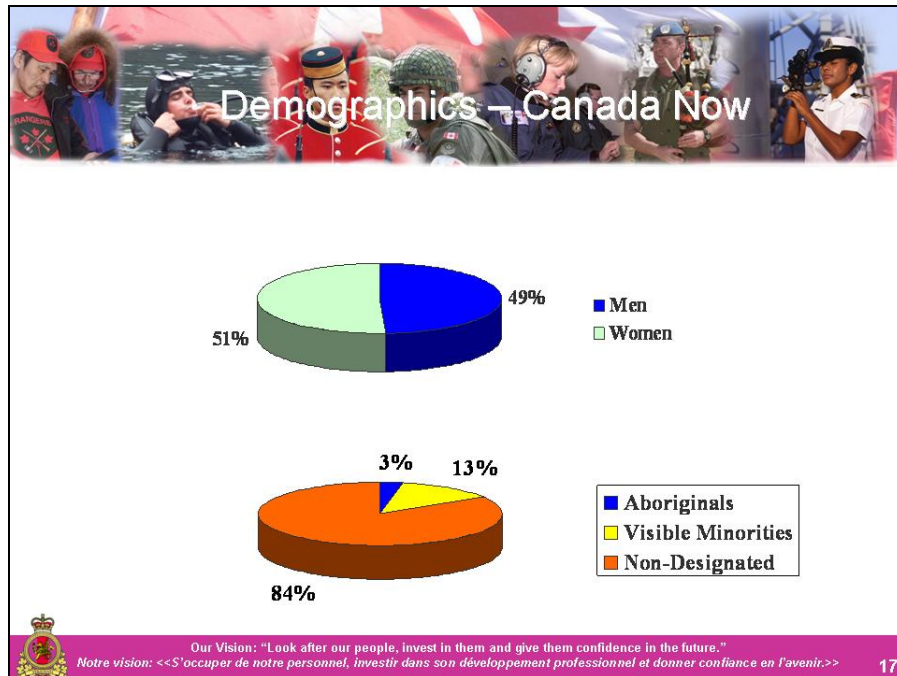
 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

15

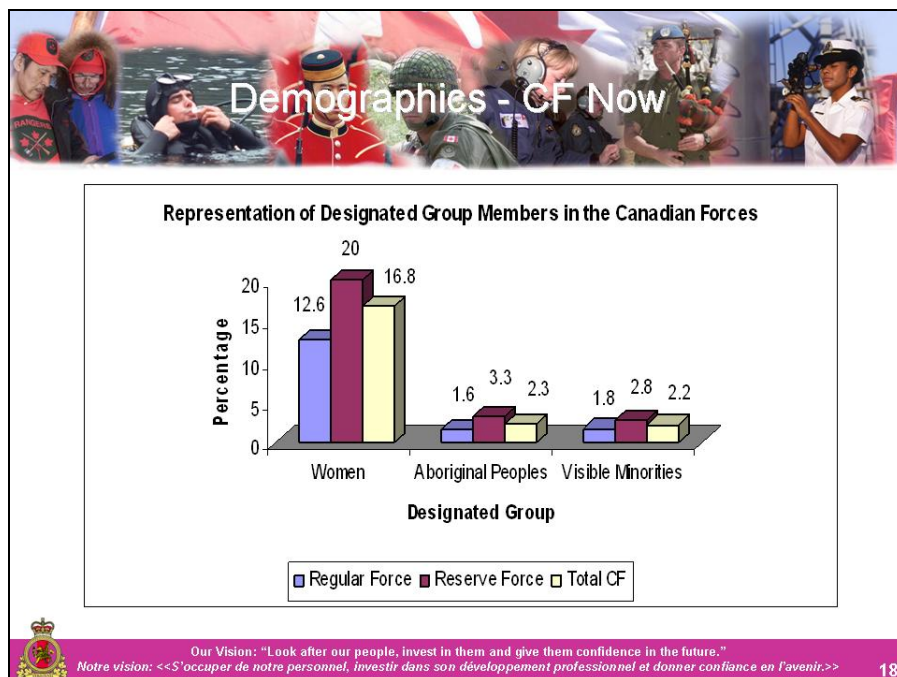
Slide 16



Slide 17




Slide 18






Slide 19




### Representation by DGM

Component	Women		Aboriginal Peoples		Visible Minorities		Persons with Disabilities	
	1997	2005	1997	2005	1997	2005	1997	2005
Regular Force	10.8%	12.6%	1.5%	1.6%	1.8%	1.8%	N/A	1.6%
Primary Reserve	18.6%	20.1%	1.0%	0.9%	2.7%	3.9%	N/A	1.0%
Supplementary Reserve	N/A	19.2	N/A	1.1%	N/A	1.7%	N/A	1.8%
Cadet Instructor Cadre	N/A	40.1	N/A	0.6%	N/A	1.2%	N/A	1.1%
Canadian Rangers	N/A	14.1%	N/A	26.9%	N/A	.8%	N/A	1.6%
<b>Total</b>	<b>13.4%</b>	<b>16.8%</b>	<b>1.3%</b>	<b>2.3%</b>	<b>2.1%</b>	<b>2.2%</b>	<b>N/A</b>	<b>1.5%</b>


 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
 Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

19

Slide 20




### EE Goals

	1999 EE Plan	2005 EE Plan (Draft)
Women	28%	22.8%
Aboriginal People	2.5%	3.2%
Visible Minorities	7.8%	8%
People with Disabilities*	N/A	N/A

■ Note that the 2005 EE goals are still being refined as part of the EE Planning process.  
 EE Goals are derived through a Workforce Analysis based on:
 

- > Labour Market Availability
- > Interest and Propensity to join the CF


 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
 Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

20

Slide 21



## EE initiatives

- **Aboriginal Programs**
  - Tommy Prince
  - CFAEP
  - Bold Eagle/Raven
- **CF Dress modifications**
  - CF Female Muslim Member
  - Aboriginal Hair Braid Policy
- **Publications**
  - Religions in Canada
  - For my Country – Black Canadians on the Field of Honour
  - Fighting for Canada – Chinese and Japanese Canadian in Military Service






Our Vision: "Look after our people, invest in them and give them confidence in the future."  
 Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>

21

Slide 22



## Defence Advisory Groups Mandate -

- Provide advice and insight to the leadership of DND and the CF on issues relevant to their membership and the implementation of employment equity
- Help similar groups form at CF establishments across the country








Our Vision: "Look after our people, invest in them and give them confidence in the future."  
 Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>>


22


Slide 23



## Defence Advisory Groups Groupes Consultatifs de la Défense

 **Defence Womens' Advisory Organization /**  
**Champion : DCDS**

 **Defence Advisory Group for Persons With Disabilities**  
**Champion : VCDS**

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>> **23**

Slide 24



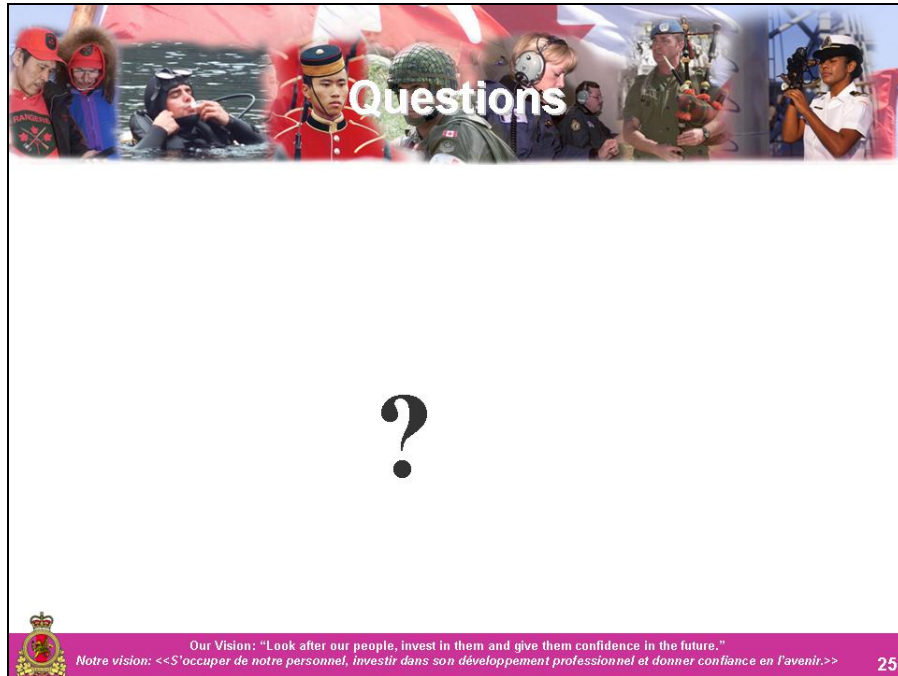
## Defence Advisory Groups

 **Defence Visible Minority Advisory Group /**  
**Champion : CEMD/CDS**

 **Defence Aboriginal Advisory Group /**  
**Champion : SMA(RH-Mil)/ADM(HR-Mil)**

 Our Vision: "Look after our people, invest in them and give them confidence in the future."  
Notre vision: <<S'occuper de notre personnel, investir dans son développement professionnel et donner confiance en l'avenir.>> **24**

Slide 25



**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

Testing for Double Risk of Victimization:  
Race/Ethnicity and Sexual Harassment in the U.S. Military, 2002

Richard J. Harris  
Juanita M. Firestone  
University of Texas at San Antonio

**Abstract**

Our research examines a sample of respondents from a Department of Defense (DoD) survey in an attempt to determine the incidence of sexual harassment in the military by race/ethnic category and to determine whether or not women's experiences differ based on race and ethnic membership. Logistic regression is used to test whether racial and ethnic minorities face double risks of victimization with respect to sexual harassment. Results do not support an adverse interaction of race and gender with respect to sexual harassment in the military for Black women; however, findings varied depending on type of harassment for Hispanic and Other Race women. The biggest surprise is that males report a higher incidence of harassment in 2002. Replicating an earlier finding, when no environmental harassment is reported individual harassment is very rare. Overall, this finding supports the importance of organizational context in producing different levels of harassment.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

Testing for Double Risk of Victimization:  
Race/Ethnicity and Sexual Harassment in the U.S. Military, 2002

Richard J. Harris  
Juanita M. Firestone  
Department of Sociology  
University of Texas at San Antonio

Over the past decade and a half sexual harassment of women in the workplace has received considerable media, academic and legal attention. Furthermore, historical accounts as well as recent reports agree that sexual harassment was and continues to be a persistent, costly problem in the workplace, including the U.S. military (Bularzik, 1978; Safran, 1976; U.S. Merit Systems Protection Board, 1981; 1988; Firestone and Harris, 1999; Firestone and Harris, 2003; Newman, Jackson and Baker, 2003; Jackson and Newman, 2004; Uggen and Blackstone, 2004). While sexual harassment has typically been defined only in terms of gender, the problem could be complicated by racism, which can leave women of color at greater risk of being targets and leave them with even fewer options than White women.<sup>1</sup> Some of these complications surfaced during the Clarence Thomas hearings. While many White women rallied to Hill's defense, many African American women did not feel comfortable siding with White women against a Black man, even though Anita Hill is Black (Calatosti & Karg, 1992).

The prevailing expectation has been that women of color face even greater problems with sexual harassment than White women (Fain & Anderton, 1987; Gruber & Bjorn, 1982; Murrell, 1996), and that they are more likely to be harassed by White men than by men of their own race (Murrell, 1996). However, very little general evidence is available to support the concept of "double jeopardy" in sexual harassment hypotheses. (see Harris and Firestone, 1996, for an empirical test.) In surveys conducted for the U.S. Navy in 1989, 1991, and 1993, Black women were less likely than White and Hispanic women to report harassment experiences (Culbertson, Rosenfeld, Booth-Kewley, & Magnusson, 1992; Culbertson, Rosenfeld & Newell, 1993; Thomas, Newell and Eliassen, 1995). This study uses data from one of the large-scale efforts to assess the prevalence of sexual harassment in the U.S. military, the *Armed Forces 2002 Sexual Harassment Survey*, providing the opportunity to test the hypothesis in a large organization. (see Lipari and Lancaster, 2003.)



### **Double Risk: The Interaction of Race and Gender**

Because gender stereotypes are not uniform across all racial groups, the experiences of minority women have been and continue to be attributed to interactions between race and gender (see, for example, Almquist, 1975; 1979; King, 1988; O'Connell, 1996; Ryff, Keyes and Hughes, 2003; Roman, 2004; Farmer and Ferraro, 2005). Researchers in a variety of disciplines including sociology, demography, economics and management refer to this interaction as “double jeopardy”<sup>2</sup> (Bell, Denton and Nkomo, 1993; Foegen, 1992; Malveaux and Wallace, 1987; Smith and Waitzman, 1994; Segura, 1992). Thus, the term “double jeopardy” reflects discrimination as women and as members of racial and/or ethnic minority groups. Definitions of sexual harassment in the workplace often focus on power differences between the harasser and the individual harassed. This focus on power differences within an organization suggests that the double burden of sexism and racism would mean that minority women would experience more harassment than that expected based on the additive effects of gender and race separately.

Research conducted after the initial integration of women into the military suggested that the women who served may have been insulated from at least some of the economic vulnerability of civilian women. Butler and Brewer (1978), for example, found no systematic differences between enlisted men and women with respect to promotion rates. Later works, however, discovered problems, which suggest that women are more vulnerable to discrimination than are men. For example, Thomas (1987) found negative bias in the evaluations of women in the Navy, and Stewart and Firestone (1992) found somewhat lower retention rates for women officers compared to men across all Services. The later studies are suggestive of the type of vulnerability that often accompanies sexual harassment.

While Black women brought a disproportionate number of the early harassment lawsuits (Colatosti & Karg, 1992), several surveys conducted for the U.S. Navy found that Black women officially reported the lowest amount of harassment among White, Black and Hispanic women included in the analysis, and that Black and Hispanic women were not harassed (whether reported or not) more than White women (Culbertson, et al., 1992; Culbertson, Rosenfeld & Newell, 1993; Thomas, Newell & Eliassen, 1995). These findings were supported by initial analysis of the Department of Defense survey by Niebuhr & Boyles (1991).

Our research examines a sample of respondents from a DoD-wide survey in an attempt to determine the incidence of sexual harassment in the military by race/ethnic category and to determine whether or not women's experiences differ based on race and ethnic membership.

### Defining Sexual Harassment

Since Farley's (1978) and MacKinnon's (1979) groundbreaking books, the key concepts in describing harassing behavior continue to be *uninvited* and *unwanted*. Most organizations use the U.S. Office of Personnel Management policy statement as the model for defining sexual harassment. In 1980 the initial definition was expanded to include any conduct of a sexual nature which created “an intimidating, hostile, or offensive working environment” (reported in U.S. Merit Systems Protection Board, 1988:2). Some consider this definition broad enough so that conceptual, empirical and theoretical inconsistencies arising from specific studies remain unresolved (Uggen and Blackstone, 2004.)

Virtually any behavior, including requests for dates, pressure for sexual activities, comments, jokes, and attempted and forcible rape can constitute sexual harassment. However, individual definitions of these behaviors as sexual harassment vary systematically depending on individual characteristics as well as specific contexts in which the behavior occurred. Thus, whether a behavior is defined as harassment depends on such factors as the status differences of the individuals involved, how often the behavior occurred, whether the individuals involved have dated previously, and whether the target is perceived as having behaved suggestively (Uggen and Blackstone, 2004; Thomas, 1995; Fitzgerald, 1990; Fitzgerald and Shullman, 1993; Pryor, 1985). While sexual harassment *appears* highly subjective, and the experiences of women and men seem variable and open to alternative explanations (Gordon, 1981), in fact individuals do attempt to discriminate between behaviors which may be defined as offensive and those defined as harassment. On the other hand, lack of objective information about the situation seems to leave individuals with a certain amount of ambivalence as to whether specific behaviors should be defined as inappropriate, serious, and offensive enough to be labeled harassment (Uggen and Blackstone, 2004; Fitzgerald and Shullman, 1993; Thomas, 1995).

This latter subjective understanding may be influenced by the race of the individuals involved. For example, Staples (1994) argued that “prevailing definitions of sexual harassment are in conflict with traditional Black dating styles.” Thus Staples implies that African American women may place behaviors classified as sexual harassment by women of other races within a context of cultural courtship style and be less likely to take offense. In addition, Giuffre and Williams (1997) found through ethnographic research that in the occupation of waiting tables respondents were more likely to label behavior as sexual harassment if the harasser was someone of a different race or ethnicity.

### Models

In general, one of three explanatory models is used to understand workplace harassment (see, Tangri, Burt & Johnson, 1982; Terpstra & Baker, 1986). Biological or “natural” perspectives suggest that sexual harassment results from the natural attraction between men and



women. Within this framework sexual behaviors in the workplace are defined as typical. However, some individuals fail to distinguish between mutual attraction and the imposition of unwanted, uninvited behaviors. This view often defines harassers as atypical when compared to normal people (i.e. “sick”) and denies any systematic patterns of sexual harassment.

A second set of explanations maintains that organizations provide the opportunity structures that perpetuate sexual harassment (DiTomaso, 1991; Fain & Anderton, 1987; Gruber & Bjorn, 1986; Kantor, 1977; Konrad & Gutek, 1986). In other words, individuals use their structural positions within an organizational system to compel others to provide sexual gratification. Under such a scenario, women and minority women in particular, are likely victims of harassment because they typically have less organizational power than men. Specific organizational characteristics such as type of technology, worker proximity, sex ratios, availability of grievance procedures, etc., may also moderate the extent of harassing behaviors (Gruber & Bjorn, 1986; Gutek & Mohasco, 1982; Kanter, 1977; Cockburn, 1989). As a result, policies regarding sexual harassment tend to be organization specific. The U.S. military offers a good example of this problem. One finding of the *Report of the Task Force on Women in the Military* (January 1988) included difficulty in assessment of the extent of sexual harassment because each Service keeps separate statistics and has different policies regarding grievances. Lack of consistency in policies across organizations could also aggravate enforcement problems. Zimmerman’s (1995) scathing description of military women’s experiences in the wake of the “Tailhook” scandal highlighted the importance of the history and environment of the Navy in contributing to the acceptance of such harassment as “normal.” Her prediction that the scandal would ultimately necessitate profound structural changes to prevent further sordid harassment incidents seems to have come to pass. Since 1988, the military has engaged in systematically collecting Service-wide data on the prevalence of harassment experiences, perceptions about harassment events, the context of such events as well as tolerance of harassment by peers and supervisors.

Socio-cultural models predict that learned sex role behaviors (i.e., gender rather than biological sex) define predictable patterns of harassment based on differential distributions of power and status between men and women (e.g., Farley, 1978; Frug, 1992: 213-29; Gutek & Morasch, 1982; MacKinnon, 1979; Konrad & Gutek, 1986) or conditioning processes which encourage individual men to act aggressively and individual women to act submissively (see Pryor, 1985; 1987; Terpstra & Baker, 1986). In other words, harassment results from socialization pressures which ‘teach’ men and women different attitudes and behaviors. Men and women learn to manage interactions according to accepted gender norms, and these learned behaviors ‘spill over’ into the workplace (Gutek and Morasch, 1982). In a similar manner, individuals may bring racial stereotypes into the workplace. In the case of women of color, gender and racial stereotypes may interact to compound individual experiences including those of sexual harassment.

## Data and Methods

The “Armed Forces 2002 Sexual Harassment Survey,” (Lipari and Lancaster, 2003) conducted for the Office of the Secretary of Defense by the Defense Manpower Data Center, provides the data base for this analysis. This was a “worldwide scientific survey of how men and women work together in the ... Active-duty Military Services.” The stated purpose of the survey was “[t]o assess the prevalence of sexual harassment and other unprofessional, gender-related behaviors.” (Lipari and Lancaster, 2003: 6). The instrument “was based on the 1995 Form B questionnaire and incorporated further psychometric and theoretical advances in sexual harassment research” (Lipari and Lancaster, 2003: 6).

A single-stage, stratified random sample of 60,415 respondents was drawn for the survey, representing male and female enlisted personnel and officers in the Army, Navy, Marines, Air Force and Coast Guard. Data were collected by mail and via the Web, with one-third of respondents returning responses via the internet. A total of 19,960 usable surveys were returned for a response rate of 36%, though not all of these respondents answered the questions related to sexual harassment (see, Flores-Cervantes, Valiant, Harding and Bell, 2003). The original sample includes 10,235 males and 9,725 females, illustrating the over sampling of women. The sampling frame was stratified by service branch, sex, pay grade, race/ethnicity, likelihood of deployment and geographic location (Elig, 2003). A series of weighting schemes was developed by the original survey team at the Defense Manpower Data Center tied to branch of service, rank, sex and race, and to test for non-response bias. The full weights provide estimated numbers of respondents that approximate the total active force as of December 2001 (Lipari and Lancaster, 2003: 5). For the analyses that follow, the full weight was divided by the mean weight, retaining estimates of the approximate total number of cases in the original survey. This procedure provides proportionate representation of respondents relative to their position in the active duty military population and allows for meaningful use of tests of statistical significance. To illustrate the impact of the weighting, there are 16,154 weighted male respondents (84.8%) and 2,906 weighted female respondents (15.2%), for a total of 19,060 weighted cases.

Due to the large number of cases, all relationships from the cross-tabular analyses presented are statistically significant based on the chi-square statistic. The double jeopardy concept requires a multivariate analysis framework to test for statistical interactions between race/ethnic minority status and gender, controlling for other possible independent variables. Logistic regression is used for this purpose because the dependent variables are dichotomous measures of whether or not the respondents report themselves to have been sexually harassed. Three dependent variables are analyzed -- whether or not the respondents report experiencing any harassment in the military, environmental harassment, or individual harassment (see Firestone and Harris, 1994; Harris and Firestone, 1997). Those harassment behaviors categorized as individual reflect demands on the target, while those designated environmental are indicative of a potentially hostile or intimidating work setting. The logistic regression

coefficients represent the change in the log of the odds of reporting harassment associated with a unit change in an independent variable, controlling for the influence of the other independent variables in the analysis. The Wald statistic, with a chi-square distribution for large samples, is used to test the possibility that the logistic coefficients are significantly different from zero. R, a transformation of the Wald statistic, measures the partial correlation between dependent and independent variables, and is used to identify the relative importance of the independent variables (see Norusis, 1990: 122-123).

The analysis will describe the reported experiences of the respondents overall by race and ethnicity and gender, and then test for interactions between race and ethnicity and other variables controlling for rank, marital status and service. Finally, race/ethnicity of respondent will be examined in relation to the reported race of the alleged offender(s).

### **Conceptualizing Sexual Harassment**

The survey furnished a detailed set of statements from which the respondents could evaluate conditions in the work site, including a set of questions which asked them “about sex/gender related talk and/or behavior that was unwanted, uninvited, and in which [the respondent] did not participate willingly” (Defense Manpower Data Center, 2002: 10). Based on these latter statements, we identified individualistic forms of sexual harassment that are personal and frequently directly physical in nature, and leave little room for misinterpretation by either the victim or the perpetrator (sexual assault, touching, sexual phone calls). This form can be differentiated from a broader category of more public, environmental harassment (jokes, whistles, suggestive looks). The latter actions can be experienced even if directed at another individual, and are ambiguous enough to leave their interpretation dependent on the environmental context.<sup>3</sup> Respondents were classified as having experienced individualistic or environmental unwanted, uninvited sexual behavior, or any form, (individualistic, environmental, or both).

Nineteen behaviorally based statements were used to “represent a continuum of unprofessional, gender-related behaviors -- not just sexual harassment.” (Lipari and Lancaster, 2003: Appendix (Tab) 4). The responses were a scale measuring frequency incidents occurred ranging from “never” to “very often.” Clearly the respondents were provided with a framework that would allow them to make meaningful and reasonably comprehensive judgments about conditions in the work place. The specificity of the list and the questionnaire format means that individuals were reporting about behaviors that they had experienced in the past twelve months, and that they defined as unwanted and uninvited, rather than offering more general statements about whether they had experienced any sexual harassment in general.

The data also allow us to compare harassment experiences based on within group and cross group relationships. In other words, we can determine the likelihood that women of color

are more likely to be harassed than White women, and whether harassment is likely to occur by members of the same or a different race/ethnic group.

Finally, those reporting harassment within the last twelve months were asked which of the incidents had the greatest effect on them as well as a series of questions about the context of that incident and their response to it. While this tiered format allows for detailed analysis of those reporting harassment, it does not allow for predicting harassment because those not harassed were not asked the same questions about organizations context.

## Results

Table 1 provides a quick comparison of results from the 2002 survey with those obtained in earlier analyses of the 1988 and 1995 surveys. Overall and Individual Harassment showed a continued pattern of decline for women (though well over half report some harassment in the last twelve months). However, there was a slight increase in Environmental Harassment. In striking contrast, males report substantially higher levels of harassment for all three measures. It is not clear yet if this is partly due to changes in measurement approaches. We will reanalyze the 1995 data to verify the pattern reported here, comparing results from Form A and Form B survey instruments.

Table 2 presents basic information on the percentages of males and females reporting harassment experiences ever, individually and environmentally by race and ethnicity. Overall, well over 27 percent of the men and well over 55 percent of the women report sexual harassment. Environmental harassment appears to be somewhat more prevalent than individual harassment, but both are pervasive for women. Among the men, the Hispanic, Black, and Other categories report significantly higher levels of ever having been harassed. However, the percentages for those classified as Black, Hispanic or White are all very similar. This overall pattern for males is essentially the same for the reports of environmental harassment and, except that Blacks and Whites have the same lower value of 11.7% for individual harassment.

The most prominent finding for the women is the much higher levels of reported harassment. The pattern by race and ethnicity is not at all similar to that for the men. Basically, Black women appear to be significantly less likely to report having experienced sexual harassment.

Table 3 presents the results of logistic regression analyses designed to test the impact of race and ethnicity controlling for rank, marital status, and branch of service. Additionally, tests for the possibility of interaction effects between race/ethnicity, gender and rank provide the most direct exploration of the possibility of double jeopardy influences. As shown in the table, all three equations (ever, environmental and individual harassment) have significant model Chi-square values and correctly predict substantial proportions of the respondents' harassment

reports. Respondents with a predicted value of 0.5 or higher are classified as being in the “harassed” group, while those with a lower value are classified as “not harassed.”

Not surprisingly, based on the earlier results, gender emerges as the dominant variable in these equations, with females much more likely to report harassment experiences. The fact that other variables have statistically significant coefficients, independent of the influence of gender, is important. First term enlisted is the second (or tied for second) most influential variable in each equation. In terms of race and ethnicity, Hispanics report themselves to be more likely to experience harassment in all three equations. The coefficient for Black is positive and significant only for overall harassment, and for environmental harassment using a one-tailed test. There is no significant relationship with “Other” race in any of the models. Those married are significantly less likely to report ever having been harassed. The Army and Navy are significantly more likely to have reports of harassment, even controlling for the other variables. In fact, being in the Navy is the third most important variable (tied for second in the Environmental equation) in each equation and being in the Army is close.

Few of the interaction variables are statistically significant. Strikingly after controlling for the other variables, Black females are significantly less likely to report overall and environmental harassment, but this interaction term is not significantly related to individual harassment. Hispanic females are less likely to report environmental sexual harassment (one-tailed test), but the coefficient is not significantly related to overall or individual harassment.

Because sex of respondent is such a powerful variable in predicting the likelihood of sexual harassment experiences, Table 4 presents logistic regression results separately for females and males. Focusing on the females first, the newly enlisted were significantly more likely to report harassment in each of the three equations, and officers were significantly less likely to report individual harassment. Along with the Army and Navy, the Marines emerge as a place where women are significantly more likely to report harassment. Black females are still significantly less likely to report sexual harassment, while the coefficients are not significant for Hispanic women. Finally, married women were significantly less likely to report harassment in all three equations. Being newly enlisted is the most important variable in the “Individual” equation and being in the Army is the most important variable in the “Ever” equation, while being in the Army or the Navy are tied for the most important in the “Environmental” equation.

Among the males, those who are married are the least likely to report ever being harassed, while those in the Army and Navy tend to have an increased likelihood of reporting harassment. Men in the Marines are significantly more likely to report individual harassment only. Black men are significantly more likely to report ever being harassed and environmental harassment (one-tailed test) and Hispanic men are significantly more likely to report harassment in all three equations.

The findings for Blacks in Table 4 refine and clarify the findings for Black females in Table 3. Black women are less likely than White women to report harassment, but Black men are more likely to report harassment than White men. While illustrating a sex/race interaction, it is not the simple race/sex interaction expected from the double jeopardy hypothesis. The double jeopardy hypothesis only predicts that minority women would experience even more harassment than expected based solely on either their race/ethnicity or their sex.

All of the equations in Table 4 have significant model Chi-square values. It is striking, however, that the percentages correctly predicting some sexual harassment for the females are high -- close to 78% for those ever harassed and about 64% for the environmentally harassed equations. The prediction for individual harassment is much lower at about 20%. These high percentages emerge, obviously, because such a large proportion of women overall report harassment experiences. The errors in prediction emerge from cases where women report no harassment. In complete contrast, the models predict that none of the men should experience any form of sexual harassment. Basically, while there are statistically significant variables influencing the probability of reporting having been sexually harassed, none of the men are predicted to attain a 50/50 likelihood based on these variables and almost none of the women are predicted to have less than a 50/50 chance.

Finally, Table 5 presents results comparing those who report both environmental and individual harassment experiences. The results are an important replication of our earlier published work documenting that when environmental harassment is not reported, individual harassment is extremely rare (Firestone and Harris, 1994; Firestone and Harris, 1999).

### **Conclusion**

The initial objective of this research was to test for double jeopardy in the sexual harassment experiences reported by minority women. The results do not support the double jeopardy expectation. In fact, Black women are significantly less likely to report any form of sexual harassment, and Hispanic women were significantly less likely to report environmental harassment, but not significantly related to reporting ever being harassed or individual harassment. None of the other variables in the logistic equations that focus on the interaction of sex and race are statistically significant. This finding stands in contrast to conclusions from other research. For example, Fain and Anderton (1987) report that minority women are among the primary targets of sexual harassment. The lower level of reported harassment for Black women may reflect an historical and cultural context in which the same behaviors identified as harassment by White women are not viewed as uninvited or unwanted by Blacks (Staples, 1994). It may be the case that experiences of racial harassment are more likely noticed by these women than sexual harassment. Nevertheless, it must be remembered that about half of the Black women stated that they experienced some sexual harassment, with about one third identifying individual harassment experiences.

Additionally, we found no support for the “biological/natural” model of harassment. The general prevalence of harassment behaviors denies the thesis that it is atypical and random. Among the crucial findings is that all women were still likely to report being harassed, and that men are increasingly likely to report harassment experiences. Married men and women were less likely to report harassment experiences. Service branch has no significant bearing on reporting of harassment by women, but men in the Army, Navy and Marines were more likely to report all types of harassment, while male Coast Guard members were significantly likely to report ever-being harassed and experiencing environmental harassment. The substantial differences between different service branches for men suggests the importance of organizational context in producing different levels of harassment. Furthermore, it may be the case that individual statuses (such as being married) and organizational context may play new roles in shaping the likelihood of labeling and reporting experiences as sexual harassment.

Our findings clearly contradict prevailing ideas related to double jeopardy. While among all respondents, Blacks, Hispanics and women were more likely to report harassment experiences, the only significant sex-race/ethnic interaction coefficients were in the opposite direction. Among female respondents, minority members were less likely to report harassment. However among male respondents, Blacks and Hispanics were significantly more likely to report harassment. The cultural model would suggest that our findings that minority women are less likely to report harassment might result from differences in subjective interpretation of harassment based on the race of the individuals involved. In other words, racial prejudice or stereotypes may foster perceptions of sexual harassment (DeFour, 1990; Staples, 1994). This argument suggests that Black women would be less likely to perceive harassment from Black men (same race) because the men’s behavior would be defined as courtship. White women would be more likely to perceive cross-race harassment because Black men’s behaviors would be seen as harassment rather than as “courting” behavior. We hope to complete further analyses to help unravel these complex issues.

Our findings do not provide strong support for cultural models which attempt to explain differences in sexual harassment by race and ethnicity. In spite of the fact that Black women were significantly less likely to report experiencing uninvited, unwanted sexual behaviors, half of the Blacks, and even higher percentages of Hispanics and women of “Other” races report such experiences. Even focusing on individual harassment, nearly one third of the Black women still reported such occurrences. Indeed men report substantially higher levels of all types of harassment than in the two previous surveys, although it is not yet clear whether this may be a result of the new measurement approach adopted in for the 2002 survey.

Most importantly, our results reinforce earlier conclusions by Firestone and Harris (1994; 1999) that the environmental context of sexual harassment must be controlled in shaping the organizational culture. As in the earlier work, results from these data very clearly illustrate that

when individuals perceived no environmental harassment, virtually no individual harassment was reported.

Table 1: Reported Harassment by Type Over Time

	Ever	Individual	Environmental
		Female	
1988	73.3	54.6	66.2
1995	59.1	39.3	49.4
2002	55.8	36.3	51.9
		Male	
1988	18.6	12.4	16.4
1995	11.7	7.1	9.6
2002	27.7	12.7	25.2
		Total	
1988	24.0	16.5	21.4
1995	17.2	11.0	14.5
2002	32.0	16.3	29.2

Sources: data for 1988 and 1995 taken from Firestone and Harris (1999), data for 2002 tabulated from the 2002 DoD survey data file.



**Table 2: Harassment in the Military by Race and Ethnicity**

	Overall Harassment		Individual Harassment		Environmental Harassment		Total N: Males	Total N: Females
	Male	Female	Male	Female	Male	Female		
	(Percentages and Numbers of Cases Indicating Yes)							
Hispanic	31.0 556	58.6 187	16.6 298	39.5 126	27.8 499	54.1 173	1794	319
White (NH)	26.6 2702	58.7 836	11.7 1195	36.0 512	24.2 2464	55.1 785	10174	1424
Black (NH)	28.5 760	49.1 432	11.7 311	31.3 275	26.1 696	45.9 404	2667	880
Other (NH)	29.0 440	56.4 159	13.7 207	39.4 111	26.9 407	51.6 145	1515	282
Total	27.6 4458	55.6 1614	12.4 2011	35.2 1024	25.2 4066	51.9 1507	16150	2905

**Table3: Logistic Regression Analyses of Harassment in the Military**

	Overall Harassment					Individual Harassment					Environmental Harassment				
	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R
MALE AND FEMALE RESPONDENTS															
Female	1.36	0.07	0.00	3.89	0.13	1.43	0.07	0.00	4.18	0.16	1.34	0.07	0.00	3.84	0.13
Black	0.10	0.05	0.00	1.10	0.01	-0.01	0.07	0.92	0.99	0.00	0.09	0.05	0.08	1.10	0.01
Hispanic	0.15	0.06	0.01	1.17	0.01	0.26	0.07	0.00	1.30	0.02	0.14	0.06	0.02	1.15	0.01
Other	0.09	0.06	0.18	1.09	0.00	0.07	0.08	0.42	1.07	0.00	0.11	0.07	0.11	1.11	0.01
Officer	-0.13	0.06	0.03	0.88	0.01	-0.74	0.11	0.00	0.48	0.05	-0.09	0.06	0.16	0.91	0.00
First Enlist.	0.31	0.04	0.00	1.36	0.05	0.51	0.05	0.00	1.66	0.08	0.26	0.04	0.00	1.29	0.04
Married	-0.23	0.04	0.00	0.79	0.04	-0.45	0.05	0.00	0.64	0.08	-0.18	0.04	0.00	0.83	0.03
Army	0.23	0.04	0.00	1.26	0.03	0.22	0.06	0.00	1.25	0.03	0.26	0.04	0.00	1.30	0.04
Navy	0.26	0.05	0.00	1.29	0.04	0.34	0.06	0.00	1.41	0.04	0.28	0.05	0.00	1.32	0.04
Marines	0.10	0.06	0.09	1.11	0.01	0.27	0.07	0.00	1.31	0.03	0.07	0.06	0.22	1.08	0.00
Coast Guard	0.42	0.10	0.00	1.53	0.03	0.23	0.14	0.10	1.26	0.01	0.46	0.10	0.00	1.58	0.03
Female Officer	0.02	0.15	0.92	1.02	0.00	0.18	0.19	0.35	1.19	0.00	-0.01	0.15	0.95	0.99	0.00
Black Female	-0.53	0.11	0.00	0.59	0.03	-0.29	0.12	0.02	0.75	0.01	-0.51	0.11	0.00	0.60	0.03
Hisp. Female	-0.24	0.15	0.11	0.79	0.00	-0.25	0.16	0.11	0.78	0.01	-0.25	0.15	0.08	0.78	0.01
Other Female	-0.21	0.16	0.20	0.81	0.00	0.03	0.17	0.86	1.03	0.00	-0.26	0.16	0.11	0.77	0.01
Black Officer	0.06	0.18	0.74	1.06	0.00	-0.30	0.41	0.46	0.74	0.00	0.11	0.19	0.55	1.12	0.00
Hisp. Officer	0.10	0.21	0.63	1.10	0.00	0.36	0.32	0.26	1.44	0.00	0.09	0.21	0.67	1.09	0.00
Other Officer	-0.11	0.22	0.61	0.90	0.00	0.07	0.38	0.85	1.07	0.00	-0.11	0.22	0.63	0.90	0.00
Black Fem. Off.	-0.04	0.33	0.92	0.97	0.00	0.37	0.54	0.49	1.45	0.00	-0.10	0.34	0.77	0.91	0.00
Hisp. Fem. Off.	0.15	0.46	0.75	1.16	0.00	-0.11	0.57	0.85	0.90	0.00	0.17	0.46	0.72	1.18	0.00
Oth. Fem. Off.	0.01	0.42	0.97	1.01	0.00	-0.02	0.56	0.98	0.98	0.00	-0.13	0.42	0.76	0.88	0.00
Constant	-1.13	0.05	0.00	0.32		-2.09	0.06	0.00	0.12		-1.29	0.05	0.00	0.28	
Model Chi-Square	1143.3					1473.76					1016.8				
(df=21) Significance	0.000					0.000					0.000				
Cox & Snell R Square	0.059					0.075					0.052				
Nagelkerke R Square	0.082					0.128					0.074				
Percent Correct															
Overall	70.427					84.196					72.334				
No Harassment	93.404					98.868					94.850				
Some Harassment	21.409					6.829					17.976				

**Table 4: Logistic Regression Analyses of Harassment in the Military**

	Overall Harassment					Individual Harassment					Environmental Harassment				
	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R
<b>FEMALE RESPONDENTS</b>															
Black	-0.48	0.10	0.00	0.62	0.07	-0.35	0.10	0.00	0.71	0.05	-0.44	0.10	0.00	0.64	0.07
Hispanic	-0.13	0.14	0.33	0.87	0.00	-0.04	0.14	0.78	0.96	0.00	-0.17	0.14	0.21	0.84	0.00
Other	-0.16	0.15	0.28	0.85	0.00	0.05	0.15	0.73	1.05	0.00	-0.18	0.15	0.21	0.83	0.00
Officer	-0.04	0.14	0.77	0.96	0.00	-0.52	0.17	0.00	0.59	0.05	-0.01	0.14	0.96	0.99	0.00
First Enlist.	0.44	0.09	0.00	1.55	0.08	0.61	0.09	0.00	1.84	0.11	0.40	0.09	0.00	1.49	0.07
Married	-0.33	0.08	0.00	0.72	0.06	-0.44	0.08	0.00	0.65	0.08	-0.28	0.08	0.00	0.75	0.05
Army	0.56	0.10	0.00	1.75	0.09	0.57	0.10	0.00	1.77	0.09	0.56	0.09	0.00	1.75	0.09
Navy	0.53	0.10	0.00	1.69	0.08	0.49	0.11	0.00	1.64	0.07	0.56	0.10	0.00	1.76	0.09
Marines	0.65	0.19	0.00	1.92	0.05	0.49	0.19	0.01	1.64	0.04	0.79	0.19	0.00	2.20	0.06
Coast Guard	0.60	0.29	0.04	1.82	0.02	0.30	0.30	0.31	1.35	0.00	0.66	0.28	0.02	1.93	0.03
Black Officer	0.04	0.28	0.90	1.04	0.00	0.08	0.35	0.82	1.08	0.00	0.02	0.28	0.96	1.02	0.00
Hisp. Officer	0.31	0.42	0.46	1.36	0.00	0.32	0.47	0.49	1.38	0.00	0.32	0.42	0.44	1.38	0.00
Other Officer	-0.04	0.36	0.91	0.96	0.00	0.11	0.42	0.79	1.12	0.00	-0.19	0.37	0.61	0.83	0.00
Constant	0.02	0.10	0.82	1.02		-0.87	0.11	0.00	0.42		-0.17	0.10	0.10	0.85	
Model Chi-Square	136.79					199.06					128.92				
(df=13) Significance	0.000					0.000					0.000				
Cox & Snell R Square	0.046					0.067					0.044				
Nagelkerke R Square	0.062					0.092					0.058				
Percent Correct															
Overall	60.583					65.615					59.392				
No Harassment	38.942					90.343					55.049				
Some Harassment	77.853					20.264					63.411				

Table 4 Continued

	Overall Harassment					Individual Harassment					Environmental Harassment				
	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R	Coeff.	S.E.	Sig.	Exp(B)	R
<b>MALE RESPONDENTS</b>															
Black	0.10	0.05	0.05	1.11	0.01	0.00	0.07	0.99	1.00	0.00	0.09	0.05	0.08	1.10	0.01
Hispanic	0.16	0.06	0.01	1.18	0.02	0.27	0.07	0.00	1.31	0.03	0.15	0.06	0.02	1.16	0.01
Other	0.09	0.06	0.16	1.09	0.00	0.07	0.08	0.40	1.07	0.00	0.11	0.07	0.09	1.12	0.01
Officer	-0.15	0.06	0.02	0.86	0.01	-0.77	0.11	0.00	0.47	0.06	-0.11	0.06	0.08	0.89	0.01
First Enlist.	0.29	0.04	0.00	1.34	0.05	0.47	0.06	0.00	1.60	0.07	0.23	0.04	0.00	1.26	0.04
Married	-0.22	0.04	0.00	0.81	0.04	-0.47	0.05	0.00	0.62	0.08	-0.17	0.04	0.00	0.85	0.03
Army	0.14	0.05	0.00	1.15	0.02	0.06	0.07	0.36	1.07	0.00	0.17	0.05	0.00	1.18	0.02
Navy	0.17	0.05	0.00	1.19	0.02	0.25	0.07	0.00	1.29	0.03	0.19	0.05	0.00	1.21	0.02
Marines	0.01	0.06	0.90	1.01	0.00	0.17	0.08	0.04	1.19	0.01	-0.04	0.07	0.52	0.96	0.00
Coast Guard	0.36	0.11	0.00	1.43	0.02	0.16	0.16	0.32	1.17	0.00	0.38	0.11	0.00	1.47	0.02
Black Officer	0.07	0.18	0.70	1.07	0.00	-0.29	0.41	0.49	0.75	0.00	0.12	0.19	0.51	1.13	0.00
Hisp. Officer	0.09	0.21	0.66	1.09	0.00	0.35	0.32	0.28	1.42	0.00	0.08	0.21	0.70	1.08	0.00
Other Officer	-0.12	0.22	0.59	0.89	0.00	0.07	0.38	0.86	1.07	0.00	-0.11	0.22	0.61	0.89	0.00
Constant	-1.07	0.05	0.00	0.34		-1.97	0.07	0.00	0.14		-1.21	0.06	0.00	0.30	
Model Chi-Square	210.64					497.98					143.8				
(df=13) Significance	0.000					0.000					0.000				
Cox & Snell R Square	0.013					0.031					0.009				
Nagelkerke R Square	0.019					0.058					0.013				
Percent Correct															
Overall	72.341					87.533					74.777				
No Harassment	100.000					100.000					100.000				
Some Harassment	0.000					0.000					0.000				

<b>Table 5: Individual by Environmental Harassment</b>			
	<b>Environmental</b>		
	None	Some	Total
<b><u>Individual</u></b>	<b>Males</b>		
None	96.7	59.5	87.3
Some	3.3	40.5	12.7
Total	100.0	100.0	100.0
N	12087	4066	16153
	<b>Females</b>		
None	91.8	37.7	63.7
Some	8.2	62.3	36.3
Total	100.0	100.0	100.0
N	1398	1508	2906

## References

- Aldrich, J. H. and F. D. Nelson 1984. *Linear Probability, Logit and Probit Models*. Beverly Hills, CA: Sage Publications.
- Almquist, Elizebeth M. (1975). Untangling the Effects of Race and Sex: The Disadvantaged Status of Black Women. *Social Science Quarterly* 56 (1): 129-142.
- Almquist, Elizabeth M. (1979). *Minorities, Gender and Work*. Lexington MA: D.C. Heath.
- E.A. Fagenson ed. *Women in Management; Trends, Issues, and Challenges in Managerial Diversity*. Newbury Park, CA: Sage.
- Butler, John S., & Brewer, Rose M. (1978). The Promotion of Enlisted Women in the Military. *Armed Forces and Society* 4(4): 679-688.
- Cockburn, Cynthia (1991). *In the Way of Women*. Ithaca, NY: ILR Press.
- Colatosti, Camille, & Karg, Elissa (1991). *Stopping Sexual Harassment*. Detroit: Labor Education and Research Project.
- Culbertson, Amy L., Rosenfeld, Paul, Booth-Kewley, S. & Magnusson, P. (1992). *Assessment of Sexual Harassment in the Navy: Results of the 1989 Navy-Wide Survey, TR-92-11*. San Diego, CA: Navy Personnel Research and Development Center.
- Culbertson, Amy L., Rosenfeld, Paul, & Newell, Carol E. (1993). *Sexual Harassment in the Active-Duty Navy; Findings From the 1991 Navy-Wide Survey, TR-94-2*. San Diego, CA: Navy Personnel Research and Development Center.
- Defense Manpower Data Center (DMDC). 2003. "Status of the Armed Forces Surveys: Workplace and Gender Relations (Forms 2002GB)," DMDC Survey No. 02-0001, Arlington, VA: DMDC
- DeFour, Darlene (1990). The Interface of Racism and Sexism on College Campuses. In Michele Paludi (Ed.) *Ivory Power: Sexual Harassment on Campus*. Albany: State University of New York.
- Department of Defense 1988. *Report of the Task Force on Women in the Military*. Washington, D.C.: U.S. Government Printing Office.

- DiTomaso, Nancy (1989). Sexuality in the Workplace: Discrimination and Harassment. Pp. 71-90 in Jeff Hearn, Deborah L. Sheppard, Petra Tancred-Sheriff & Gibson Burrell eds. *The Sexuality of Organization* London: Sage.
- Elig, Timoghy W. (2003). Sampling Design for the 2202 Status of the Armed Forces Surveys – Workplace and Gender Relations. In B. J. George and K. R. Kroger (Eds.) *2002 Status of the Armed Forces Surveys – Workplace and Gender Relations: Statistical Methodology Report*, Report No. 2003-014. Arlington, VA: Defense Manpower Data Center.
- Fain, Terri C., & Anderton, Douglas L (1987). Sexual Harassment: Organizational Context and Diffuse Status. *SexRoles* 17: 291-311.
- Farley, Lyn (1978). *Sexual Shakedown: The Sexual Harassment of Women on the Job*. San Francisco, McGraw-Hill.
- Farmer, Melissa M., & Ferraro, Kenneth F. (2005). Are Racial Disparities in Health Conditional on Socioeconomic Status? *Social Science and Medicine* 60, 191-204.
- Foegen, J. H. (1992). The Double Jeopardy of Sexual Harassment. *Business and Society Review*, 82, 31-35.
- Firestone, Juanita M. and Harris, Richard J. (1994). Sexual Harassment in the U.S. Military: Individualized and Environmental Contexts. *Armed Forces and Society* 21: 25-43.
- Firestone, Juanita M., & Harris, Richard J. (1999). Changes in Patterns of Sexual Harassment in the U.S. Military: A Comparison of the 1988 and 1995 DoD Surveys. *Armed Forces & Society*, 25 (4): 613-632.
- Firestone, Juanita M., & Harris, Richard J. (2003). Perceptions of Effectiveness of Responses to Sexual Harassment in the U.S. Military, 1988 and 1995. *Gender, Work and Organization* 10(1): 42-64.
- Fitzgerald, Louise F. (1990). Sexual Harassment: The Definition and Measurement of a Construct. In Michele A. Paludi (Ed.) *Ivory Power: Sexual Harassment on Campus*. Albany, NY: SUNY.
- Fitzgerald, Louise F., & Shullman, Sandra L. (1993). Sexual Harassment: A Research Analysis and Agenda for the 1990s. *Journal of Vocational Behavior* 35: 309-326.
- Flores-Cervantes, I., Valliant, R., Harding, L., and Bell, B. (2003). Weighting for the 2002 Status of the Armed Forces Surveys – Workplace and Gender Relations. In B. J. George and K. R. Kroeger (Eds.) *2002 Status of the Armed Forces Surveys – Workplace and Gender Relations: Statistical Methodology Report*, Report No. 2003-014. Arlington, VA: Defense Manpower Data Center.
- Frug, Mary J. (1992). *Women and the Law*. Westbury NY: The Foundation Press, Inc.

- Giuffre, Patti A., & Williams, Christine L. (1997). Boundary Lines: Labeling Sexual Harassment in Restaurants. In Maxine Baca Zinn, Pierrette Hondagnew-Sotelo and Michael A. Messner (Eds.) *Through the Prism of Difference; Readings on Sex and Gender*. (pp. 372-387) Boston: Allyn & Bacon.
- Gruber, James E., & Bjorn, Lars (1986). Women's Responses to Sexual Harassment: An Analysis of Sociocultural, Organizational and Personal Resource Models. *Social Science Quarterly*, 29: 14-826.
- Gutek, Barbara A. & Morasch, Bruce (1982). Sex-Ratios, Sex-Role Spillover, and Sexual Harassment of Women at Work. *Journal of Social Issues* 38: 55-74.
- Harris, Richard J. and Firestone, Juanita M. (1997). Subtle Sexism in the U.S. Military; Individual Responses to Sexual Harassment. In Nijole V. Benokraitis (Ed.) *Subtle Sexism; Current Practice and Prospects for Change* (pp. 154-171), Thousand Oaks, CA: Sage Publications.
- Harris, Richard J., & Firestone, Juanita M. (1996). Testing for the Interaction of Race and Sex: Sexual Harassment in the U.S. Military. *National Journal of Sociology*, XX (4): 1-19.
- Jackson, Robert A., & Newman, Meredith A. (2004). Sexual Harassment in the Federal Workplace Revisited: Influences on Harassment by Gender. *Public Administration Review*, 64(6): 705-717.
- Kasinsky, R.G. 1992. Sexual Harassment: A Health Hazard for Women Workers. *New Solutions* Winter : 74-83.
- King, D.K. (1988). Multiple Jeopardy, Multiple Consciousness: The Context of a Black Feminist Ideology. *Signs* 14(1): 42-72.
- Konrad, Allison M. & Gutek, Barbara A. (1986). Impact of Work Experiences on Attitudes Towards Sexual Harassment. *Administrative Science Quarterly* 31: 422-438.
- Lipari, Rachel N., & Lancaster, Anita R. (2003). *Armed Forces 2002 Sexual Harassment Survey*, DMDC Report No., 2003-026, Arlington, VA: Defense Manpower Data Center.
- MacKinnon, Catherine A. (1979). *Sexual Harassment of Working Women*, New Haven, CT: Yale.
- Malveaux, Juliet, & Wallace, Patricia (1987). Minority Women in the Workplace. In S. Koziara, M. Moskow, & L. D. Tanner (Eds.), *Women and Work: Industrial Relations Research Association Research Volume*. Washington, D.C.: Bureau of National Affairs.
- Martindale, Melanie 1990. *Sexual Harassment in the Military: 1988*. Arlington, VA: Defense Manpower Data Center.



- Martindale, Melanie 1991. Sexual Harassment in the Military: 1988. *Sociological Practice Review* 2 (3): 200-216.
- Murrell, Audrey L. (1996). Sexual Harassment and Women of Color: Issues, Challenges, and Future Directions. In Margaret S. Stockdale (Ed.) *Sexual Harassment in the Workplace; Perspectives, Frontiers, and Response Strategies* (pp. 51-66). Thousand Oaks, CA: Sage.
- Newman, Meredith A., Jackson, Robert A., & Baker, Douglas D. (2003). Sexual Harassment in the Federal Workplace. *Public Administration Review* 63(4): 472-83.
- Niebuhr, Roger E., & Boyles, Walter R. (1991). Sexual Harassment of Military Personnel. *International Journal of Intercultural Relations* 15: 445-457.
- Norusis, Marija, J. (1990). *SPSS Advanced Statistics Student Guide*. Chicago, IL: SPSS Inc.
- O'Connell, Lynn. (1996). Race and Sex Discrimination: A Comparison. In Paula J. Dubeck & Katherine Borman (Eds.), *Women and Work; A Handbook*. New York: Garland.
- Pryor, John B. (1985). The Lay Person's Understanding of Sexual Harassment. *Sex Roles* 13: 273-286.
- Pryor, John B. (1987). Sexual Harassment Proclivities in Men. *Sex Roles* 17: 269-290.
- Roman, Petvie M. (2004). Race and Gender Differences in Workplace Autonomy: A Research Note. *Sociological Inquiry* 74(4): 590-603.
- Ryff, Carol D., Keyes, Corey L. M., & Hughes, Diane L. (2003). Status Inequalities, Perceived Discrimination, and Eudaimonic Well-Being: Do the Challenges of Minority Life Hone Purpose and Growth? *Journal of Health and Social Behavior* 44(3): 275-291.
- Staples, Robert (1994). Anita Hill, Sexual Harassment, and Gender Politics in the Black Community. In Maxine Baca Zinn, Pierrette Hondagneu-Sotelo, & Michael A. Messner (Eds.) *Through the Prism of Difference; Readings on Sex and Gender* (pp. 186-204) Boston: Allyn & Bacon.
- Stewart, James B., & Firestone, Juanita M. (1992). Looking for a Few Good Men: Predicting Patterns of Retention, Promotion, and Accession of Minority and Women Officers. *The American Journal of Economics and Sociology* 51(4): 435-458.
- Segura, Denise A. (1992). Walking on Eggshells; Chicanas in the Labor Force. In Stephen B. Knouse, Paul Rosenfeld, & Amy L. Culbertson (Eds.), *Hispanics in the Workplace* (pp. 173-193) Newbury Park, CA: Sage.

- Tangri, Sandra S., Burt, Martha R. & Johnson, Leanor. B. (1982). Sexual Harassment at Work: Three Explanatory Models. *Journal of Social Issues* 38: 33-54.
- Terpstra, Donald E. & Baker, Douglas D. (1986). Psychological and Demographic Correlates of Perception of Sexual Harassment. *Genetic, Social and General Psychology Monographs* 112: 459-478.
- Thomann, Daniel A. & Wiener, Richard L. 1987. Physical and Psychological Causality as Determinants of Culpability in Sexual Harassment Cases. *Sex Roles* 17: 573-591.
- Thomas, Marie D. (1995). *Gender Differences in Conceptualizing Sexual Harassment, TR-95-1*. San Diego, CA: Navy Personnel Research and Development Center.
- Thomas, Patricia J. (1987). Appraising the Performance of Women in the U.S. Navy. In Barbara Gutek & Laurie Larwood (Eds.) *Women's Career Development*. Beverly Hills, CA: Sage.
- Thomas, Patricia J., Newell, Carol E. and Eliassen, Dawn M. (1995). *Sexual Harassment of Navy Personnel; Results of a 1993 Survey, TN-91-1*. San Diego, CA: Navy Personnel Research and Development Center.
- Uggen, Christopher, & Blackstone, Amy (2004). Sexual Harassment as a Gendered Expression of Power. *American Sociological Review* 69: 64-92.
- U.S. Merit Systems Protection Board. 1988. *Sexual Harassment in the Federal Government: An Update*. Washington, D.C.: Office of Merit Systems Review and Studies.
- Zimmerman, Jean (1995). *Tail Spin; Women at War in the Wake of Tailhook*. New York: Doubleday.

Organizational Climate and Tolerance of Harassment  
Based on Sexual Orientation in the U.S. Military

Juanita M. Firestone  
Richard J. Harris  
University of Texas at San Antonio

**Abstract**

This paper examines data from the survey commissioned in 2000 by the Office of the Inspector General to “initiate an assessment of the environment at representative installations ... within each Military Department with respect to the application of the homosexual conduct policy.” We analyze responses as to whether or not respondents feel free to report harassment of perceived homosexuals and, if not, whether they are concerned about retaliations. Results indicate that the Air Force had the largest percentage of people who felt free to report incidents of harassment and the Marine Corps had the lowest. Interestingly, in spite of perceptions that only a small proportion of incidents were reported, the Marines also had the smallest percentages of respondents who did not report the incidents because of feared reprisal. Navy respondents reported the most fear of reprisal from reporting an incident of harassment. However, it is telling that between one fifth and one third of respondents from all branches reported fear of retaliation, either for themselves or for the target. Most incidents were not reported through official channels. In the more than 5,000 incidents witnessed by a senior ranking person, respondents reported that they only intervened to stop the harassment 28% of the time. Our data suggest that the current organizational climate of the U.S. military is not open to accepting homosexual members. Part of the problem may be found in the policy itself, because the policy cannot create or support a climate of zero tolerance for harassment based on sexual orientation. As long as homosexual members must remain hidden and not identifiable, heterosexual members may not recognize the harassment as “real,” may not be able to see the extent of harassment, and therefore ignore incidents.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## Organizational Climate and Tolerance of Harassment Based on Sexual Orientation in the U.S. Military

Juanita M. Firestone  
Richard J. Harris  
Department of Sociology  
University of Texas at San Antonio

As attitudes towards homosexuals and homosexuality have become tolerant over time (Lofland),<sup>4</sup> there has been increasing social movement focused on the integration of gay/lesbian/bisexual/ transgender people into mainstream society.<sup>5</sup> Research indicates that individual characteristics impact the level of tolerance and, depending on the characteristics of those in policy making/implementing positions, may also impact progress with regard to broad acceptance within organizations such as the U.S. military. Being highly religious, male, having low levels of education and living in the South have been associated with lack of tolerance towards homosexuals.<sup>6</sup>

Homosexuals have been discriminated against in the military in a similar manner as Blacks were during World War II. Officially the federal stance for both groups was/is: integration of Blacks/ homosexuals would damage moral, discipline and good order thus undermining military effectiveness. Belkin and Embser-Herbert argue that the original justification has no merit and that in response the military has shifted the justification for excluding gays and Lesbians to maintaining privacy for heterosexual members.<sup>7</sup> This is in contrast to the policies of Canada, France, Australia, the Netherlands, Israel, Germany, Sweden, Brazil and Japan where policies allow homosexuals to serve openly in the military.<sup>8</sup>

In spite of the past ban on serving, many homosexuals have served in the U.S. military and an influx often occurs during wartime mobilization, such as World War II. Often they served “with distinction and without difficulty”.<sup>9</sup> Prior to World War I, the U.S. military had no official legal restrictions on homosexuality – commanders were responsible for enforcing their personal view on the issue. After WWI sodomy was included in the Articles of War of 1920 as a separate offense but offenders were treated for their medical condition and retained in the military.<sup>10</sup>

The ban on homosexuals serving in the military did not officially occur until 1950, when Congress combined the military laws from all the military branches under the Uniform Code of Military Justice (UCMJ). Sodomy is punitive article 125 and reads:

Any person subject to this chapter who engages in unnatural carnal copulation with another person of the same or opposite sex or with an animal is guilty of sodomy. Penetration, however slight, is sufficient to complete the offense.

Article 120 addresses the infraction of Rape and Carnal Knowledge, the latter being a part of the definition of the sodomy offense.

- (a) Any person subject to this chapter who commits an act of sexual intercourse with a female not his wife, by force and without consent, is guilty of rape and shall be punished by death or such other punishment as a court-martial may direct.
- (b) Any person subject to this chapter who, under circumstances not amounting to rape, commits an act of sexual intercourse with a female not his wife who has not attained the age of sixteen years, is guilty of carnal knowledge and shall be punished as a court-martial may direct.
- (c) Penetration, however slight, is sufficient to complete either of these offenses.

During the Carter administration the phrase “homosexuality is incompatible with military service” was given official recognition and used to involuntarily give an honorable discharge to offenders.<sup>11</sup> Since that time, at least 1,000 servicemen and women per year have been non-voluntarily separated from the military.<sup>9</sup> The inconsistency with which homosexual rights are viewed by that national leadership is highlighted by the following quote summarizing the views of Dick Cheney who said “he would oppose a ban prohibiting the hiring of homosexuals as civilian employees in the Department of Defense, but he supported the exclusion of gays from the military”.<sup>12</sup>

In the spring of 2000, the Office of the Inspector General was tasked by the Secretary of Defense to “initiate an assessment of the environment at representative installations ... within each Military Department with respect to the application of the homosexual conduct policy.” This paper examines the data from that assessment and attempts to determine what factors are likely predictors of harassment based on perceived sexual orientation.

### **The Don’t Ask, Don’t Tell, Don’t Pursue Policy**

The debate surrounding the exclusion of homosexuals from military service became pronounced during the 1992 presidential campaign. When Bill Clinton took office he first suspended the question asking recruits if they were homosexuals. Various forms of a more liberal policy surrounding the service of homosexuals included proposals for a “Don’t Ask, Don’t Shout”, “Don’t Ask, Not in Uniform”, “Don’t Ask, Don’t Investigate” or “Don’t Ask, Don’t Tell” policy where “Don’t Shout” meant being very discrete, “Not in Uniform” meant off post and off duty and “Don’t Investigate” meant no gathering of evidence to later force separations from the military.<sup>13</sup> The most liberal of these is the “Don’t Ask, Don’t Investigate” since it protected homosexual service members for the duration of their service. The most conservative is the “Don’t Ask, Don’t Tell” policy because the other two allowed homosexuals to live an openly gay or Lesbian lifestyle to varying degrees.

In 1993 the Secretary of Defense released a “Policy on Homosexual Conduct in the Armed Forces” which states:

The Department of Defense has long held that, as a general rule, homosexuality is incompatible with military service because it interferes with the factors critical to combat effectiveness, including unit morale, unit cohesion and individual privacy. Nevertheless, the Department of Defense also recognizes that individuals with a homosexual orientation have served with distinction in the armed services of the United States.

Therefore, it is the policy of the Department of Defense to judge the suitability of persons to serve in the armed forces on the basis of their conduct. Homosexual conduct will be grounds for separation from the military services. Sexual orientation is considered a personal and private matter, and homosexual orientation is not a bar to service entry or continued service unless manifested by homosexual conduct.

This became known as the “Don’t Ask, Don’t Tell, Don’t Pursue” policy and is still under scrutiny by the gay and lesbian community. The previous policy allowed for the Services to ask potential recruits their sexual orientation and denied initial enlistment to homosexuals. The “Don’t Ask, Don’t Tell, Don’t Pursue” policy forces service members to stay in the closet and attempts to protect their privacy by not allowing the active pursuit of an individual based on a suspicion of homosexuality, unless the person in question has already committed an act of homosexuality (an investigation cannot be initiated based on hearsay). In addition, the policy stipulates that all incoming recruits will initially be trained on the policies concerning homosexuals in the military and current members will receive periodic refresher training. By contrast to the earlier procedures this policy appears more liberal since sexual orientation cannot be asked, but identical to the previous guidelines, homosexual conduct is grounds for discharge. Additionally, since the inception of the new policy, more homosexuals have been discharged than were discharged under the old guidelines.<sup>14</sup>

### **Organizational Climate**

Several elements of military culture may increase the likelihood that sexual harassment occurs and that targets do not report harassment through established channels. First, organizational cohesion is very highly valued within the military; thus divulging negative information about a fellow soldier is considered taboo.<sup>15</sup> Second, harassing behaviors have long been a part of military culture exacerbating reporting problems because “tattling” about time-honored practices (e.g. lewd jokes, negatively stereotypical commentary, obscene gestures) can label individuals as non-team players who would disrupt the organizational mission. Third, in an environment where hostile interactions toward and about women are the norm, there may be social pressure on men to engage in such behavior to maintain their standing among peers. In as much as gay men are stereotypically seen as feminine, and Lesbians are viewed as masculine

they would also be harassed. Additionally, in the past the exclusion of women and things deemed feminine has been used as a form of including only men viewed as masculine enough.<sup>16</sup> While multiple masculinities exist within the military culture (based on rank, race, ethnicity, age and branch of service), the successful military is still viewed as a “manly” organization.<sup>17</sup> Thus, given the strong emphasis on male attributes in defining a “good” soldier, being male may provide enough power to engage in harassing behaviors in spite of their being against military policy.

The literature related to sexual harassment complaints may be informative with respect to harassment based on sexual orientation. For example, research indicates that complicating factors exist because specific organizational characteristics such as type of technology, worker proximity, sex ratios, availability of grievance procedures, etc., may moderate the extent of harassment, the types of responses, and perceptions about adequacy of responses to such behaviors.<sup>18</sup> Such contextual differences often produce policies attempting to alleviate harassment, which are organization specific. The lack of consistency can intensify enforcement problems because targets may be concerned about whether the complaint will be taken seriously and may be confused about appropriate steps to be taken in filing a complaint.

Before individuals are likely to take action against harassment behaviors, they must feel safe from retaliation and have multiple access points.<sup>19</sup> Furthermore, providing informal channels which are “off the record” are only likely to be successful if the person reporting the incident sees an organizational response.<sup>20</sup> Looking specifically at sexual harassment, Gruber<sup>21</sup> found that organizations that take a variety of steps to stop harassment are more likely to be successful than those relying only on educating employees. In addition, the attitudes of leaders can be important. LaVite and Stoller<sup>22</sup> found that organizational leaders who actively discourage harassment create an organizational climate in which unacceptable behaviors are less likely to be tolerated. Research on sexual harassment indicates that whether or not incidents are reported as well as the type of response initiated by the target, impact perceptions about the effectiveness of solutions.<sup>23</sup>

With respect to responses to harassment, again the research on sexual harassment may be helpful. Most informal responses to sexual harassment are individual attempts by the target to confront the harasser, although “off the record” discussions with supervisors are also possible.<sup>24</sup> Formal responses typically entail utilizing institutional procedures. Using formal organizational channels may depend on perceptions that the complaint will be taken seriously, and that the prevailing policies will support a fair outcome.<sup>25</sup> Targets who fear retaliation are unlikely to report incidents, regardless of the egregiousness of the acts.<sup>26</sup>

## **Data**

From January 24th to February 11th 2000, the Office of the Inspector General of the Department of Defense surveyed 71,570 active duty Service members from all branches of the military. Thirty-eight installations were selected worldwide. Large installations were defined as those in the top two thirds in size for each respective branch and small installations having at least 1,000 assigned personnel, but not included in first category.

Eight large installations were selected from each of Army, Air Force and Navy. Two small installations were selected from the same three branches and one recruit training installation was picked from the Navy, Air Force and Marine Corps. Additionally, three large and one small Marine installation were surveyed and two Army recruit training installations. To account for deployed sailors with no land-based installations, 11 ships and submarines were surveyed.

Once installations or ships were identified, individual units were randomly selected to be administered the survey. Normally individuals are randomly selected with probability proportionate to size (PPS); however, because of the sensitive nature of this study, confidentiality was heightened to the extent that no subgroups were inspected for adequate representation. For example, race is not asked on the questionnaire, so it is likely that Blacks, Hispanics, Native Americans and Asians are either over represented or under represented and we cannot correct this by applying a weighting measure.

More precisely, 16 percent of respondents were female, while in 1999 there were 190,808 women of 1,385,700 people in the forces; roughly 13.8%<sup>27</sup>, so we could weight according to gender, but with other important factors, such as education, marital status, debt-ratio, pay grade, time-in-service and race we cannot. Because of this, the statistics cannot be projected to the larger population of the Military Departments individually. Also the survey reflects only the respondents' perceptions, so the validity cannot be completely determined. For instance any one harassment incident could be a result of other factors such as race, job performance, nationality, sex or religion, but the observer does not know the sexual orientation of the victim and thus may not know the precise characteristics of the harassment. Finally, since many incidents occur in a crowd, and may be the result of frustration-aggression,<sup>28</sup> incidents are likely to be witnessed by several respondents and cannot be equated to actual harassment frequencies.



## Analysis

In earlier research<sup>29</sup>, we found that the target of the harassment was male in 70% of the cases with 12% being female and 18% being both males and females. For harassment events, 77% of the targets were enlisted with only 3% officers; 5% were both officer and enlisted (the other 15% were of unknown rank). The harasser was male 75% of the time, with females accounting for 5% and both males and females being harassers in 20% of the events. The harasser was enlisted for 70% of the incidents, an officer in 9% and unknown rank in 21% of the incidents. The harasser was a peer of the target in 60% of the cases, a subordinate 19%, a supervisor 11% and a commander 4% with the other 6% unknown.

The incidents of harassments occurred in the work place 48% of the time and 46% of the time during duty hours. Twenty-three percent of the incidents occurred during basic military training and another 17% occurred during other student courses. The situation happened while the person was deployed 18% of the time and the incident involved males harassing males 65% of the time. Both males and females harassing males and females occurred 12% of the time.

To evaluate the organizational climate associated with harassment based on perceived sexual orientation and the reporting of such harassment, the questions in Table 1 were asked of all respondents. The first four questions target the level of tolerance of the organizational leadership. The highest percentage of tolerance of harassment is at the peer level with 10% of respondents indicating that other unit members tolerate harassment based on sexual orientation. What is disconcerting is the high percentage of respondents who don't know what the toleration atmosphere is. In fact over 40% of respondents do not know if the installation or ship commander tolerates harassment.

TABLE 1: PERCEIVED TOLERANCE OF HARASSMENT BASED ON SEXUAL ORIENTATION

		Frequency	Percent
Commander of my installation/ship tolerates harassment based on perceived sexual orientation	No	41089	58.0
	Yes	1154	1.6
	Don't Know	28628	<b>40.4</b>
	Total	70871	100.0
My unit commander tolerates harassment based on perceived sexual orientation	No	43420	61.3
	Yes	1332	1.9
	Don't Know	26137	36.9
	Total	70889	100.0
My immediate supervisor tolerates harassment based on perceived sexual orientation	No	44625	63.0
	Yes	2808	4.0
	Don't Know	23431	33.1
	Total	70864	100.0
Other unit members tolerate harassment based on perceived sexual orientation	No	32827	46.4
	Yes	7263	10.3
	Don't Know	30709	43.4
	Total	70799	100.0
Is it clear that harassment is prohibited and will not be tolerated to prevent harassment based on perceived homosexuality	No	9827	13.9
	Yes	44580	63.0
	Don't Know	16393	<b>23.2</b>
	Total	70800	100.0
Are complaints investigated to prevent harassment based on perceived homosexuality	No	11121	15.7
	Yes	15408	21.8
	Don't Know	44117	<b>62.4</b>
	Total	70646	100.0
Are penalties enforced against offenders to prevent harassment based on perceived homosexuality	No	9798	13.9
	Yes	16465	23.3
	Don't Know	44332	<b>62.8</b>
	Total	70595	100.0
Are penalties enforced against unit commanders or supervisors who tolerate harassment to prevent harassment based on perceived homosexuality	No	9900	14.0
	Yes	13065	18.5
	Don't Know	47567	<b>67.4</b>
	Total	70532	100.0

The next four questions pin point the area of actions taken concerning a harassment incident. Again the respondents who answer “Don’t Know” are among the highest percentage. Nearly two thirds of respondents did not know if complaints concerning sexual harassment were investigated. Over two thirds did not know if penalties were enforced on commanders and supervisors who tolerated harassment based on perceived sexual orientation.

Investigating the organizational climate questions by service branch revealed that respondent’s from the Army had the highest percentages of responses indicating an organizational climate of tolerance. In Table 2 only the “Yes” and “Don’t Know” responses are displayed for the first four questions, a “Yes” response meaning there is a level of harassment being tolerated in the organization. In the other four questions only the “No” or “Don’t Know”

responses are displayed, a “No” meaning complaints are not investigated and penalties are not enforced. Over all the Air Force had the highest percentage for all questions with “Don’t Know” responses, which is consistent with them having the lowest percentage of personnel trained on the policy. In these first four questions relating to actions concerning a complaint, the Army had the highest responses of “Yes” on all for questions. This trend reversed for the Marine Corps, which had the highest number of “No” responses for all four of the action questions. Almost three fourths of Air Force personnel did not know if penalties were enforced on commanders or supervisors who harassed others based on perceived sexual orientation.

Another question asks respondents, “Do people get away with harassment of perceived homosexuals at you installation or base?” Across all services, half of respondents are not aware of any harassment occurring. Seven percent said people never get away with harassment, another 7% said infrequently people get away with harassment, 8% indicated people get away with harassment frequently and 28% did not know.

TABLE 2: PERCEIVED TOLERANCE OF HARASSMENT BY SERVICE

		Army	Navy	Marines	Air Force
Commander of my installation/ship tolerates harassment based on perceived sexual orientation	Yes	<b>2.1%</b>	1.7%	1.9%	<u>0.9%</u>
	Don't Know	40.9%	<u>38.3%</u>	38.8%	<b>42.2%</b>
My unit commander tolerates harassment based on perceived sexual orientation	Yes	<b>2.6%</b>	1.9%	2.0%	<u>0.9%</u>
	Don't Know	<u>35.7%</u>	36.6%	35.9%	<b>38.9%</b>
My immediate supervisor tolerates harassment based on perceived sexual orientation	Yes	<b>4.9%</b>	4.4%	4.7%	<u>2.3%</u>
	Don't Know	32.8%	31.8%	<u>33.3%</u>	<b>34.4%</b>
Other unit members tolerate harassment based on perceived sexual orientation	Yes	<b>12.5%</b>	10.5%	11.5%	<u>6.9%</u>
	Don't Know	44.7%	40.5%	<u>40.0%</u>	<b>45.6%</b>
Is it clear that harassment is prohibited and will not be tolerated to prevent harassment based on perceived homosexuality	Yes	<u>13.2%</u>	14.7%	<b>14.9%</b>	13.6%
	Don't Know	<u>20.4%</u>	22.2%	23.3%	<b>27.0%</b>
Are complaints investigated to prevent harassment based on perceived homosexuality	Yes	17.1%	15.8%	<b>20.4%</b>	<u>12.2%</u>
	Don't Know	60.0%	59.5%	<u>55.1%</u>	<b>70.8%</b>
Are penalties enforced against offenders to prevent harassment based on perceived homosexuality	Yes	14.9%	14.4%	<b>17.3%</b>	<u>10.8%</u>
	Don't Know	59.9%	60.1%	<u>51.1%</u>	<b>71.5%</b>
Are penalties enforced against unit commanders or supervisors who tolerate harassment to prevent harassment based on perceived homosexuality	Yes	15.2%	14.6%	<b>17.4%</b>	<u>10.9%</u>
	Don't Know	65.2%	64.6%	<u>61.7%</u>	<b>74.8%</b>
		Highest percentage			
		<b><u>Lowest percentage</u></b>			

The Army had the highest percentage of people who are perceived to “get away with” harassment based on perceived sexual orientation most and least often (see Table 3). The Marine Corps had the highest percentage of respondents who said no one ever got away with harassment. The Air Force had the lowest percentages for respondents perceiving that people get away with harassment infrequently and frequently, as well as the smallest percentage saying individuals never get away with harassment.

TABLE 3: PERCEPTIONS THAT PEOPLE GET AWAY WITH HARASSMENT

	Army	Navy	Marines	Air Force
Not Aware of Harassment	<u>46.2%</u>	50.2%	47.3%	<b>55.4%</b>
Never	5.9%	8.5%	<b>8.6%</b>	<u>5.7%</u>
Infrequently	<b>7.6%</b>	7.3%	7.0%	<u>6.4%</u>
Frequently	<b>10.7%</b>	8.6%	9.8%	<u>5.3%</u>
Don't Know	<b>29.6%</b>	25.4%	27.4%	27.2%
Total	100.0%	100.0%	100.0%	100.0%

Highest percentage

**Lowest percentage**

To ascertain the individual's perception of the atmosphere for reporting each respondent was asked, "Would you feel free to report harassment of perceived homosexuals?" Seventy-seven percent of the 68,815 people who responded said "Yes." Table 5 presents the responses by the separate branches. The Air Force has the highest percentage of personnel who feel free to report incidents of harassment based on perceived sexual orientation (see Table 5). The Navy has the second highest followed by the Army with the Marine Corps having the highest percentage of personnel who do not feel free to report harassment with 24%.

TABLE 5: FEEL FREE TO REPORT HARASSMENT BY BRANCH

	Army	Navy	Marines	Air Force	Total
No	21.2%	18.0%	<b>24.4%</b>	16.5%	19.4%
Yes	78.8%	82.0%	75.6%	<b>83.5%</b>	80.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Several follow-up questions were asked if the respondent chose "No" to the freedom to respond question to determine the source of their "No" response. Table 6 shows the frequencies of the responses. Being retaliated against by peers in the unit was the most cited reason for not feeling free to report harassment while being retaliated against by a supervisor was the least cited reason.

TABLE 6: FEAR OF RETALIATION FOR REPORTING HARASSMENT

		Frequency	Percent
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against you by your supervisor	No	14368	76.2
	Yes	4492	<u>23.8</u>
	Total	18860	100.0
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against you by other unit members	No	12482	66.6
	Yes	6273	<b>33.4</b>
	Total	18755	100.0
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against the person being harassed by his or her supervisor	No	13527	72.5
	Yes	5122	27.5
	Total	18649	100.0
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against the person being harassed by other unit members	No	12643	68.0
	Yes	5946	32.0
	Total	18589	100.0
Highest percentage			
<b><u>Lowest percentage</u></b>			

When the same questions are viewed based on the context of service branch a familiar pattern appears. The Navy had the highest percentage of respondents who do not feel free to report harassment at all levels while the Marine Corps had the lowest at all levels (see Table 7, only “Yes” answers are displayed) except from the supervisor, which the Air Force had the lowest percentage.

For those respondents who had witnessed or experienced an incident of harassment based on perceived sexual orientation were asked to pick the most significant situation in the last 12 months and answer if the situation was reported at which level it was reported. Table 8 shows that a small portion of incidents are reported and secondly that the immediate supervisor of the person being harassed is the most prominent form of reporting. The least used method of reporting is to another DoD office or individual with responsibility for follow-up, such as the Inspector General or the Military Equal Opportunity office.

TABLE 7: FEAR OF RETALIATION BY SERVICE BRANCH

	Army	Navy	Marines	Air Force
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against you by your supervisor	Yes 24.5%	<b>26.5%</b>	22.0%	<u>21.3%</u>
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against you by other unit members	Yes 34.0%	<b>37.0%</b>	<u>26.8%</u>	33.2%
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against the person being harassed by his or her supervisor	Yes 27.9%	<b>29.9%</b>	<u>22.2%</u>	27.7%
Do you not feel free to report harassment of perceived homosexuals because you would be concerned that actions or retaliations would be taken against the person being harassed by other unit members	Yes 32.4%	<b>35.0%</b>	<u>24.6%</u>	32.9%
Total	100.0%	100.0%	100.0%	100.0%

Highest percentage

Lowest percentage

Results based on branch of service indicate that the Navy has the largest percentages of “Yes” responses at all levels except for the immediate supervisor (see Table 9.)

TABLE 8: ORGANIZATIONAL LEVEL AT WHICH HARASSMENT INCIDENTS WERE REPORTED

		Frequency	Percent
Reported to immediate supervisor of person harassed	No	11183	42.1
	Yes	2640	<b>9.9</b>
	Don't Know	12710	47.9
	Total	26533	100.0
Reported up chain of command of person harassed	No	11321	42.8
	Yes	2237	8.5
	Don't Know	12898	48.8
	Total	26456	100.0
Reported to Supervisor of person who did it	No	11243	42.6
	Yes	2287	8.7
	Don't Know	12882	48.8
	Total	26412	100.0
Reported up chain of command of person who did it	No	11434	43.3
	Yes	1746	6.6
	Don't Know	13216	50.1
	Total	26396	100.0
Reported to another DoD office or military person with responsibility for follow-up	No	11732	44.5
	Yes	974	<u>3.7</u>
	Don't Know	13635	51.8
	Total	26341	100.0

Highest percentage

Lowest percentage

The Air Force has the highest percentage who reported to their immediate supervisor as well as the lowest percentage of all “Yes” answers except for reporting to the immediate supervisor. The Marines had the smallest percentage who indicated the incident was reported to the immediate supervisor.

TABLE 9: ORGANIZATIONAL LEVEL AT WHICH HARASSMENT INCIDENTS WERE REPORTED BY BRANCH

		Army	Navy	Marines	Air Force
Reported to immediate supervisor of person harassed	Yes	10.8%	11.8%	8.8%	<u>6.9%</u>
	Don't Know	48.0%	46.4%	48.2%	<b>49.3%</b>
Reported up chain of command of person harassed	Yes	9.5%	9.6%	7.6%	<u>5.4%</u>
	Don't Know	48.7%	48.3%	48.5%	<b>49.6%</b>
Reported to Supervisor of person who did it	Yes	9.7%	10.1%	7.8%	<u>5.5%</u>
	Don't Know	48.6%	48.1%	48.7%	<b>50.0%</b>
Reported up chain of command of person who did it	Yes	7.5%	7.8%	5.8%	<u>4.0%</u>
	Don't Know	50.1%	49.6%	49.6%	<b>50.8%</b>
Reported to another DoD office or military person with responsibility for follow-up	Yes	3.5%	4.7%	3.7%	<u>2.8%</u>
	Don't Know	<b>52.1%</b>	51.7%	51.4%	51.5%
		Highest percentage			
		<u>Lowest percentage</u>			

Two questions address the presence of a senior ranking individual and her or his contributions to resolving the incident. Across all branches, when a person was a witnessing or experiencing harassment based on perceived sexual orientation within the last 12 months there was a senior ranking person present 21% of the time (see Table 10). Of those 5,704 incidents where a senior ranking person was present, intervention only occurred 28% of the time.

TABLE 10: PRESENCE AND IMPACT OF SENIOR RANKING WITNESS

		Frequency	Percent
Was this incident witnessed by someone senior to the person being harassed or the person doing the harassing	No	14390	53.8
	Yes	5704	21.3
	Don't Know	6646	24.9
	Total	26740	100.0
Did that senior person do anything immediately to stop the harassment	No	6131	72.0
	Yes	2384	28.0
	Total	8515	100.0

When analyzed by branch, the Air Force had the highest percentage of senior ranking individuals in attendance of the harassment incident while the Army had the lowest. The Marine Corps had the highest percent of ranking personnel who intervened to stop the harassment while the Air Force had the lowest (see Table 11).

TABLE 11: INFLUENCE OF SENIOR RANKING WITNESS BY BRANCH

		Army	Navy	Marines	Air Force
Was this incident witnessed by someone senior to the person being harassed or the person doing the harassing	Yes	<u>51.8%</u>	53.0%	52.4%	<b>59.9%</b>
	Don't Know	<b>25.5%</b>	24.0%	25.4%	24.2%
Did that senior person do anything immediately to stop the harassment	Yes	28.5%	28.6%	<b>30.3%</b>	<u>23.9%</u>
		Highest percentage			
		<u>Lowest percentage</u>			



## Discussion

It is important to note that only 38% of 70,631 active-duty military respondents reported experiencing or witnessing harassment from perceived homosexuality during the last 12 months.<sup>30</sup> Over forty percent (42.8%) of Marine Corps personnel reported witnessing or experiencing harassment, 38.5% of Navy and 26.1% of Air Force personnel also said they had witnessed or experienced such incidents. The Army had the highest percent of their people witnessing or experiencing harassment based on perceived sexual orientation (45%). Additionally, Air Force personnel reported fewer types of harassment than did other service members. Senior enlisted personnel reported twice as many types of harassment as did officers.

In investigating the organizational climate of the military with respect to perceptions of harassment incidents, we found that the Air Force had the largest percentage of people who felt free to report incidents of harassment and the Marine Corps had the lowest. Interestingly, in spite of perceptions that only a small proportion of incidents were reported, the Marines also had the smallest percentages of respondents who did not report the incidents because she or he feared reprisals. Navy respondents reported the most fear of reprisals from reporting an incident of harassment. However, it is telling that between 1/5 and 1/3 of respondents from all branches reported fear of retaliation, either for themselves or for the target.

Of the people who reported they were aware of incidents of harassment based on sexual orientation, most indicated that the incident was not reported to someone in the chain of command. If the incident was reported, the most common level choice was to report the incident to the immediate supervisor of the person being harassed. The smallest percentages of incidents were reported to another DoD agency. In the more than 5,000 incidents witnessed by a senior ranking person, respondents reported that she or he only intervened to stop the harassment 28% of the time. Of military branches, respondents in the Marines were more likely to say that the senior ranking person intervened than all other branches. Conversely, Air Force leadership was perceived as least likely to put an end to the harassment.

Table 12: Feel Free to Report Harassment by Awareness of Harassment by Sex of Respondent

Female		Not Aware	Aware	N	Chi Sq (df)	Gamma
	Free to report	87.4	68.4	10721	572.432*(1)	0.525
	Not Free to report	12.6	31.6			
Male	Free to report	88.1	68.6	55308	3160.975*(1)	0.543
	Not Free to report	11.9	31.4			
	Total	100	100			

\* p = .000

As indicated in Table 12, the majority of both males and females said they felt free to report harassment based on perceived sexual orientation. However, both males and females who

said they were aware of harassment were three times as likely to have said they did not feel free to report harassment (31.6% of women; 31.4% of men) compared to those who said they were not aware of any harassment (12.6% of women; 11.9% of men). This finding is statistically ( $p = .000$ ) significant and strong ( $\gamma = .525$  for women;  $\gamma = .543$  for men) for both men and women.

Multivariate logistic regressions predicting whether respondents said they did or did not feel free to report harassment based on sexual orientation support the bivariate results (see Tables 13 and 14). Fewer predictors were significant for male respondents (12) than for female respondents (19), however for both groups, awareness of harassment remained a significant predictor of not feeling free to report harassment. Interestingly, respondents who were senior enlisted and senior officers were significantly more likely to have said they were most felt free to report harassment. Among women, being in the Navy or the Air Force meant respondents were more likely to say they felt free to report harassment. And for both men and women, if the harassment occurred during training respondents said they were significantly more likely to feel free to report it. Among the strongest predictors of not feeling free to report harassment for women were if the perpetrator was an officer or a superior, while the strongest predictors for men were if the perpetrator was a subordinate or if they reported awareness of any harassment.

Because the majority of respondents said they felt free to report harassment, our models do a better job predicting that category (98.6%) than those who say they do not feel free to report harassment (7% for men; 8.5% for women). Overall correct predictions were 81.4% for men and 81.5% for women. Pseudo  $R^2$  values indicate our models explain about 7% of the variance for men and 8.5% for women. Clearly other factors besides those included in our models impact whether respondents said they felt free to report harassment based on perceived sexual orientation.

**Table 13: Logistic Regression Analysis of Feel Free to Report Harassment (Males)**

	Coefficient	S.E.	Sig.	Exp(B)
Sr. Enlist	-0.441	0.064	0.000	0.644
Jr. Off.	-0.653	0.107	0.000	0.520
Sr. Off.	-1.011	0.164	0.000	0.364
Navy	-0.076	0.076	0.319	0.927
Marine	-0.077	0.134	0.564	0.926
AirForce	0.005	0.066	0.939	1.005
Perp Male	0.025	0.142	0.858	1.026
Perp Multi	0.008	0.151	0.956	1.008
Perp Peer	0.181	0.091	0.048	1.198
Perp Enl	0.018	0.114	0.872	1.019
Perp Off	0.502	0.173	0.004	1.652
Perp Sup	0.405	0.130	0.002	1.499
Perp Commander	0.076	0.261	0.770	1.079
Perp Sub.	0.143	0.104	0.170	1.154
Target Male	-0.159	0.112	0.156	0.853
Target Enl.	0.088	0.145	0.547	1.092
Target Off.	0.182	0.291	0.532	1.199
Target Multi Rank	-0.082	0.240	0.732	0.921
Target Multi Rank	0.292	0.132	0.027	1.340
Mil Base	0.255	0.095	0.007	1.291
Off Base	-0.066	0.093	0.479	0.936
Basic Training	-0.096	0.113	0.396	0.909
Target Student	-0.168	0.108	0.120	0.845
Duty Station	0.219	0.085	0.010	1.245
Current Duty	0.209	0.094	0.026	1.233
Prior duty	0.030	0.100	0.764	1.030
Workplace	0.159	0.119	0.181	1.173
Duty Hours	0.179	0.118	0.130	1.196
On ship	0.179	0.187	0.338	1.197
TDY	-0.196	0.135	0.145	0.822
During Training	-0.376	0.059	0.000	0.686
Aware	0.421	0.183	0.021	1.524
Constant	-1.717	0.099	0.000	0.180
Model Chi-Square	4984.331			
(df=32) Significance	0.000			
Cox & Snell R Square	0.092			
Nagelkerke R Square	0.148			
Percent Correct				
Overall	81.4			
Free Report	98.6			
Not Free Report	7			

**Table 14: Logistic Regression Analysis of Feel Free to Report Harassment (Females)**

	Coefficient	S.E.	Sig.	Exp(B)
Sr. Enlist	-0.615	0.028	0.000	0.541
Jr. Off.	-1.055	0.057	0.000	0.348
Sr. Off.	-1.708	0.088	0.000	0.181
Navy	-0.091	0.035	0.009	0.913
Marine	0.084	0.036	0.020	1.088
AirForce	-0.152	0.032	0.000	0.859
Perp Male	-0.115	0.100	0.249	0.891
Perp Multi	-0.037	0.108	0.731	0.964
Perp Peer	0.094	0.042	0.025	1.098
Perp Enl	0.106	0.048	0.028	1.112
Perp Off	0.302	0.074	0.000	1.353
Perp Sup	0.227	0.058	0.000	1.255
Perp Commander	-0.132	0.105	0.210	0.877
Perp Sub.	0.282	0.047	0.000	1.325
Target Male	0.175	0.071	0.014	1.192
Target Enl.	-0.085	0.059	0.148	0.919
Target Off.	0.339	0.131	0.010	1.404
Target Multi Rank	0.054	0.101	0.590	1.056
Target Multi Rank	0.221	0.084	0.009	1.248
Mil Base	0.068	0.043	0.115	1.070
Off Base	0.030	0.039	0.445	1.030
Basic Training	-0.006	0.044	0.898	0.994
Target Student	0.112	0.046	0.016	1.118
Duty Station	0.078	0.037	0.034	1.082
Current Duty	0.144	0.039	0.000	1.155
Prior duty	-0.009	0.042	0.834	0.991
Workplace	0.045	0.050	0.360	1.046
Duty Hours	0.126	0.049	0.010	1.134
On ship	0.034	0.060	0.567	1.035
TDY	0.147	0.048	0.002	1.159
During Training	-0.447	0.025	0.000	0.639
Aware	0.537	0.105	0.000	1.711
Constant	-1.386	0.043	0.000	0.250
Model Chi-Square	830.406			
(df=32) Significance	0.000			
Cox & Snell R Square	0.079			
Nagelkerke R Square	0.127			
Percent Correct				
Overall	81.5			
Free Report	98.6			
Not Free Report	8.5			

## Conclusion

Our data suggest that the current organizational climate of the U.S. military is not open to accepting homosexual members. The multivariate findings suggest that if the respondents were higher ranking civilians, or military members, or if the incident(s) occurred during training, then respondents were more likely to say they felt free to report the harassment. However, if the perpetrators were higher ranking civilians or officers, or if the incidents occurred at a military installation including the respondents' duty station, then they said they were less likely to feel free to report incidents. Perhaps most importantly, being aware of harassment continued to have a significant impact on respondents' perceptions that they were NOT free to report harassment even after multivariate controls. Clearly it is easy to say that one feels free to report incidents if the respondent is not aware of or oblivious to incidents of harassment. The fact that those who say they are aware of incidents were more likely to say they do not feel free to report them suggests that the organizational climate of the military is not yet open to individuals perceived as sexual minorities.

Part of the problem may be found in the policy itself, because the policy cannot create or support a climate of zero tolerance for harassment based on sexual orientation. As long as homosexual members must remain hidden and not identifiable, heterosexual members may not recognize the harassment as "real," may not be able to see the extent of harassment, and therefore ignore incidents. As is clear from many years of organizational research, if policies are not enforced, they have no value. Furthermore, if individuals are worried about confidentiality and fear retaliation incidents are unlikely to be reported if they are perceived as harassment based on sexual orientation. This fear is likely compounded by the fact that when there was a senior ranking witness to the incident she or he was unlikely to stop the harassment. It seems clear that, at least as of this time, the current 'Don't Ask, Don't Tell, Don't Pursue' policy has had little effect on changing the anti-homosexual climate of the U.S. military.

## Establishing the Prima Facie Case for Adverse Impact: Four-Fifths Rule Versus Statistical Significance Tests

Patrice L. Esson and Neil M. A. Hauenstein,  
Virginia Tech

### **Abstract**

For over two decades the four-fifths rule has been used in courtrooms as the primary determinant of the existence of adverse impact. However, the use of statistical significance testing has become a viable alternative. This paper serves as an overview of the use of the four-fifths rule versus significance tests in the attempt to establish a prima facie case of adverse impact. Results indicate that the four-fifths rule is losing ground as the primary determinant, as consideration of results from significance tests grows more popular. More surprisingly, there is a profound difference in the percentage of final rulings favoring the protected group as a function of method used to establish the prima facie case. Minorities are more likely to win the case if statistical significant testing is used instead of the four-fifths rule. Possible explanations for these differences are explored.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense**

## Establishing the Prima Facie Case for Adverse Impact: Four-Fifths Rule Versus Statistical Significance Tests

Patrice L. Esson and Neil M. A. Hauenstein,  
Virginia Tech

Discrimination in the workplace has been a source of concern for human resource managers, industrial psychologists and members of the legal system for more than three decades. Adverse impact occurs when members of minority groups are selected or promoted at substantially lower rates than majority group members. Reducing adverse impact in organizations has served as the catalyst for the development of affirmative action programs, the use and revision of cognitive tests and test batteries as well as the utilization and placement of cutoff scores (Morris & Lobsenz, 2000; Sackett & Ellingson, 1997). Regardless, disparate impact still occurs, especially against African Americans and Hispanic Americans when tests of general mental abilities are used. It is not unusual for members of protected groups to seek redress in the Federal court system by filing an employment discrimination lawsuit.

In the landmark case of *Griggs v. Duke Power Company* (1971), the United States Supreme Court ruled that discrimination exists when there is a substantial statistical disparity in selection rates of minority and majority applicants or employees unless the employer can prove that the disparity is a business necessity. This case laid the foundation for the present operational definition of adverse impact, i.e., a substantially lower selection rate for minority group members in comparison to the selection rate for majority group members. However, the courts failed to quantify the term “substantial discrepancy.” Instead, the Equal Employment Opportunity Commission’s (EEOC) *Federal Uniform Guidelines on Employee Selection Procedures* (1978) recommended use of the four-fifths or eighty percent rule which concurrently became the standard used to establish a prima facie case of disparate impact. The *Guidelines* stipulate that, “[a] selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) or eighty percent (80%) of the rate for the group with the highest rate will generally be regarded ... as evidence of adverse impact” (Section 4D, p38297).

Since 1978, the four-fifths rule has been used widely by organizations and throughout the judicial system, and has become the most common method for determining adverse impact in the courtroom (Morris & Lobsenz, 2000). The use of the four-fifths rule has gone beyond referring to race and gender minorities. It has also been used routinely in making rulings with regards to discrimination against disabled persons via the Americans with Disabilities Act of 1990, and, with regards to older employees via the Age Discrimination in Employment Act of 1967. However, Boardman (1979), and Greenberg (1979) found that the use of the four-fifths rule did not accurately reflect the true degree of disparate impact, suggesting that often times the ratio underestimated the extent to which adverse impact existed within an organization. A second problem was cited by Lawshe (1987) who suggested that use of the four-fifths rule had ignored the potential detrimental effects of sampling error (as cited in Morris & Lobsenz, 2000). Lawshe stated that the continued utilization of the four-fifths rule in organizations would produce inconsistent results over time. However, despite these problems the four-fifths rule continued to

be used in courtrooms to make rulings, given its ease of use and the seeming lack of any other feasible alternative.

The concern about the problems associated with the four-fifths rule did not lay dormant. Instead, researchers began to explore possible alternatives that could be used to accurately identify adverse impact as well as make rulings in the courtroom. Shoben (1978) (as cited by Cascio & Aguinis, 2001) and other experts suggested the use of significance tests could overcome the limitations of the four-fifths rule. The logic of statistical significance testing in this domain is that, assuming the population selection ratio between two groups is equal (i.e., the null hypothesis), then the probability that the observed differences between the selection ratios of the two groups resulted from discrimination can be estimated. Of course, as with any statistical significance test, the Type I error rate must be set. If the observed differences between the selection ratios exceed the difference established by the Type I error rate, then the null hypothesis is rejected. Assuming that the selection ratio is smaller for the protected group than the majority group, then rejection of the null hypothesis is evidence of adverse impact against the minority group. Not surprisingly, the use of statistical significance testing to determine the presence of adverse impact has made its way into the courtroom (Cascio & Aguinis, 2001).

Despite the increased acceptance of significance tests to establish adverse impact, there are several concerns about the use of significance tests for this purpose. Cascio and Aguinis (2001) stated that although significance tests indicate a difference exists in selection processes it is not possible to specify the size of the difference. It has also been suggested that the sample size could directly affect the power of the tests thereby affecting the accuracy of the inferences drawn from the results of these tests (Cascio & Aguinis, 2001). In terms of the use of significance tests in the judicial system, Kaye (1986) (as cited in Morris and Lobsenz, 2000) suggested that “judges may not fully understand the relationship between statistical conclusions and legal constructs” (p. 90). These thoughts were also echoed in *Waisome v. Port Authority* (1991) in which it was stated that “[l]awyers and judges working with statistical evidence generally have only a partial understanding ... and are laboring in an alien and unfamiliar terrain.” Morris and Lobsenz (2000) also stated that significance tests place the bulk of the burden of proof on the plaintiff as opposed to the defendant. Finally, Morris and Lobsenz, (2000) suggested that “statistical evidence is only one piece of the puzzle” in the legal arena (p.91), and thus additional evidence is often times needed to prove a case of adverse impact beyond reasonable doubt.

For over two decades judges have used the four-fifths rule as the major determinant of the existence of adverse impact in organizations, despite the “rule of thumb” nature of this ratio. Only within the last decade and a half have judges begun considering the use of alternative methods of establishing the existence of adverse impact such as the use of significance tests. Significance tests have been widely explored psychometrically. However, the use of such tests still remains unexplored in the legal system within the context of adverse impact court cases. Thus, there is a need for researchers to explore the employment of the four-fifths rule and its alternatives in the courtroom. This exploration would help us better understand what methods are currently being used, what methods seem to be the most effective, and determine areas for future research. Such an exploration would also help to determine whether or not there is sufficient evidence to support claims by Cascio and Aguinis (2001) who suggested that if, and



when the EEOC decides to revise the *Uniform Guidelines on Employee Selection Procedures* (1978), the use of alternatives to the four-fifths rule such as significance tests should be considered for possible inclusion.

The purpose of this study is to examine the extent to which statistical significance testing has supplanted the four-fifths rule, and to see if the use of statistical significance testing to establish adverse impact is related to the outcome of cases.

## Method

The authors conducted an extensive search to locate Federal court cases for this overview using the search engine LexisNexis. We searched for court cases from the beginning of 1993 to the end of 2003. Court cases were searched for using the keyword term “adverse impact” and five specific anchors - *statistical test*, *significance test*, *statistical significance*, *four-fifths*, and *eighty percent* - in order to confine the search to fair employment practices. All five searches were conducted at the Federal district court level, the Federal courts of appeal level and at the United States Supreme Court. Each list generated by the search engine was reviewed on a case-by-case basis to eliminate those cases that bore no relation to adverse impact in the workplace.

A total of 92 cases were found that related to the keyword phrase “adverse impact” in the district courts. Of this number, 51 were disregarded because they were not related to fair employment practices. There were a total of 40 cases found at the courts of appeal level, 25 of which were disregarded for not bearing any direct relationship to adverse impact in the workplace. No cases were found using any of our five anchors at the Supreme Court level. As a result the remainder of this review will focus on court cases generated at the district court and appellate court levels.

Each related court case was reviewed individually specifically looking at the use of the four-fifths or eighty percent rule and/or the use of significance tests in the rulings made by the court. In the case of the appellate courts our primary focus was whether significance tests were considered in upholding or overturning district court rulings. For cases that used significance tests, the type of test used, if mentioned, was also noted.

## Results and Discussion

### Landmark Cases

In our review of the cases that used significance testing there were two cases that occurred before 1993 that were referenced by several of the cases we examined. As such, the authors thought it important to examine these two cases before proceeding with our discussion. The two cases were *Bridgeport Guardians v. City of Bridgeport* (1991) and *Waisome v. The Port Authority* (1991). Both cases were heard at the appellate level, and both concerned the promotion of minority police officers to the rank of sergeant based on their performance on tests. More importantly, in both cases the results of significance tests were used as evidence of adverse impact. Although statistical probabilities were used at the district court level to adequately establish prima facie evidence of discrimination in *Bridgeport*, the district court ruled against the

City of Bridgeport and suggested that a score banding procedure be implemented as a remedy to promoting officers that would not result in adverse impact as an alternative to the strict rank-order-based method originally used. The appellate court agreed that the establishment of a prima facie case was sufficient, and claimed that the argument made by the defendant-city that the strict rank ordering procedure originally used was beneficial to achieving the city's goals were not supported. As such, the district court's ruling against the city was upheld.

In *Waisome v. Port Authority* (1991), the district court ruled that because the four-fifths rule was not violated, evidence of significance differences between selection ratios were not sufficient evidence of adverse impact and therefore ruled in favor of the employer. The appellate court reversed the district court's ruling arguing that the significant differences between the selection ratios were sufficient to establish a prima facie case. However, the appellate court also noted that the low power of the significance test made it difficult for the district court to rule correctly.

These two cases have become "landmark" cases in adverse impact litigation. Of the cases examined during our 1993 – 2003 window, eight cases cited *Bridgeport* and 18 cited *Waisome* at the district court level. At the appellate level, *Bridgeport* was cited in eight cases and *Waisome* was also cited in eight cases. These cases lay the foundation for how attorneys have used the four-fifths and significance testing in the courts. We will now examine the rulings that have occurred since these cases in 1991.

### Federal District Courts

Of the 41 cases found at the district court level, 18 (44%) used only the four-fifths rule to establish the prima facie case. There were 15 (37%) cases that used only statistical significance tests to establish adverse impact. Finally, there were 8 (20%) that used both the four-fifths rule and significance testing.

The use of the four-fifths versus significance testing is related to the year in which the case was heard. Prior to 1998, only three of eight cases used statistical significance testing. In 1998, 5 cases out of 7 considered the results of significance tests. Between 1998 and 2004, 70% of the cases presented significance testing as evidence of adverse impact. It appears likely that statistical significance testing will continue to gain popularity.

There was also another clear trend. In the eight cases that used both the four-fifths rule and significance testing, violation of the four-fifths rule was the primary evidence used by the plaintiff to establish a prima facie case, and the significance testing was used as supplemental evidence. In contrast, in the 15 cases that only used statistical significance testing, there typically was no violation of the four-fifths rule, which was the main rebuttal by the defendant to the plaintiff's prima facie case.

### Cases that Used the Four-Fifths Rule

In 26 cases where the violation of the four-fifths rule was used to establish a prima facie case, the courts ruled that the defendants met their burden in only 10 (38%) cases. Furthermore,

of these 10 cases, only 4 rulings were made in favor of the minorities suing the organization. That is, the minorities won only 15% of the cases where violation of the four-fifths rule was the primary evidence of adverse impact.

In the six cases where a prima facie case was established but the plaintiff lost, most rulings indicated that the defendant had established the validity or business necessity of their selection/promotion process. For example, in *Cotter v. City of Boston*, (2003) the court ruled the adverse impact was justified because the test questions were based on actual skills needed to perform the job. In a more unusual ruling, in *Speller v. City of Roanoke*, (2001), the court agreed that adverse impact was present, but because the number of minorities who took the selection test was especially small, the conclusion of adverse impact was not reliable.

### Cases that Used Only Statistical Significance Testing

The statistical evidence presented to support the prima facie case has varied. For example, multiple regression was used in *Rhodes v. Cracker Barrel Old Country Store*, (2003), and chi-squared tests were used in *United States v. N.Y. City Bd. of Educ.*, (2000). In terms of establishing prima facie evidence of adverse impact in which significance tests were considered, seven out of 15 (46%) were seen by judges as sufficiently establishing the prima facie case. More surprisingly, five out of seven (71%) were adjudicated in favor of plaintiffs.

Although the sample sizes are small, the comparisons are striking. Thirty-eight percent of the cases based primarily on the four-fifths rule were seen to meet the prima facie burden, whereas 46% of the cases that present only significance tests were seen to meet the burden. More striking, however, is the difference in ultimate success of the plaintiffs --15% for cases using the four-fifths rule versus 71% for the cases using only significance testing. What makes this latter finding even more impressive is that the four-fifths rule was not violated in most of the cases where the plaintiffs presented only statistical significance evidence of adverse impact.

### Courts of Appeal

Of the 15 cases at the appellate level, 11 (73%) used only the four-fifths rule, two (13%) used both forms of evidence, and 2 (13%) used only significance testing. The two cases that only used statistical evidence were *Munoz v. Orr*, (2000) and *Peightal v. Metropolitan Dade County*, (1994).

The critical issue at the appellate level is whether or not the appellate court upheld the ruling of the district courts. Only one case was overturned, and the appellate ruling favored the minority group. In that case, violation of the four-fifths rule was used to establish the prima facie case. As such, the disparity between the two methods is not quite as dramatic, 19 % success rate for the four-fifths rule versus 71% success rate for significance testing.

## **Discussion**

Although the differential success rate for minorities when using the four-fifths rule versus significance testing is exciting, at this time it can only be treated as an interesting trend.

Nonetheless, it is an effect that does lend itself to speculation about why there is such disparity in the success rates of the two methods.

The most obvious explanation is that judges and lawyers do not fully understand the nuances of statistical significance testing; therefore, they are more likely to be swayed by such evidence. Kaye (1986 as cited in Morris and Lonsenz, 2000) suggested it is possible that judges do not fully understand how the results of significance tests apply to legal constructs which could therefore result in their relying primarily on the results they understand such as percentage passes on selection tests. Several of the court cases examined also noted judges and legal counsel's low comfort level with the results of significance tests (e.g. *Waisome v. Port Authority*, 1991).

There are other possible explanations, however. It may be that the merits of the cases that have relied on statistical significance testing are stronger for the minority group than the cases where the four-fifths rule has been used. Given the relatively small sample of cases, it is possible that the differing success rates are due to chance. Alternatively, there could be a systematic reason for this trend. Perhaps cases with stronger merits attract more highly skilled legal representation than cases of more questionable merit. It might follow that a more highly skilled legal team for the minority group would avail itself of more sophisticated expert witnesses. If stronger cases attract more skilled litigators who in turn attract more sophisticated expert witnesses, then the relationship between the use of significance testing and ultimate success is not surprising.

Time will be the arbiter of the above explanations. If it is simply a matter of lack of sophistication, then the differing success rates should dissipate as a function of judges and lawyers becoming more familiar with statistical arguments. As sophistication increases, the limitations of significance testing should become apparent to judges, which should in turn lower the success rate of cases that use only statistical significance testing. Likewise, if the differing success rates are random fluctuations due to sampling error, then such differences in success rates should dissipate as more cases are heard. However, if the differing success rates are due to the "merits of the case" argument, then the differing success should take much longer to dissipate.

### **Limitations and Suggestions for Future Research**

The first limitation is that only 56 cases were available to research. Furthermore, 15 of these 56 cases were appeals of district court rulings, so these appellate court cases are not independent of the district court rulings. Furthermore, the use of significance tests to establish adverse impact made up less than 30% of the total number of cases examined. Obviously, this issue must be examined further when there are more cases available.

The second limitation of this study is that perhaps our search strategy inappropriately excluded relevant cases. It is possible that we did not use all the relevant search terms, thereby missing relevant cases. Also, we only searched for cases using Lexis/Nexis. It is possible that another search engine such as Westlaw could have produced more cases.

Future research needs to focus on the relative strengths and limitations of statistical significance testing in the domain of adverse impact litigation. There are many complex issues surrounding the appropriateness of statistical significance testing to establish prima facie evidence of discrimination.

### **Conclusion**

“The unhappy persistence of both the practice and the lingering effects of ... discrimination against minority groups in this country is an unfortunate reality” (*Cotter v. City of Boston*, 2003). This paper examined the use of the four-fifths rule and significance tests in making rulings in adverse impact court cases. The authors found that the four-fifths method continues to be widely used and significance testing continues to grow in popularity. Cascio and Aguinis’ (2000) suggestion that the EEOC include alternative methods to establish a prima facie case in its *Uniform Guidelines* should not be taken lightly.

### References

- Boardman, A. E. (1979). Another Analysis of the EEOC “Four-Fifths” Rule. *Management Science*, 25, 770-776.
- Boston Police v. City of Boston. 147 F. 3d. 13.
- Bridgeport Guardians v. City of Bridgeport, 933 F. 2d 1140. (1991).
- Cascio, W., & Aguinis, H. (2001). The Federal *Uniform Guidelines on Employee Selection Procedures* (1978): An Update on Selected Issues. *Review of Public Personnel Administration*, 21, 200-218.
- Cotter v. City of Boston, 193 F. Supp. 2d 323 (2003).
- Greenberg, I. (1979). An Analysis of the EEOC “Four-Fifths” Rule. *Management Science*, 25, 762-769.
- Griggs v. Duke Power Co., 401 U.S. 424 (1971).
- Lanning v. SEPTA. 97-1161 (1998).
- Morris, S. B., & Lobsenz, R. E. (2000). Significance Tests and Confidence Intervals for the Adverse Impact Ratio. *Personnel Psychology*, 53, 89-111.
- Munoz v. Orr, 200 F.3d 291 (2000).
- Peightal v. Metropolitan Dade County, 26 F. 3d. 1545 (1994).
- Rhodes v. Cracker Barrel Old Country Store, Inc. 213 F.R.D. 619 (N.D. Ga., Dec. 31, 2002)
- Sackett, P. R., & Ellingson, J. E. (1997). The Effects of Forming Multi-Predictor Composites on Group Differences and Adverse Impact. *Personnel Psychology*, 50, 707- 722.
- Smith v. Xerox Corp. 196 F.3d. 110. (1999).
- United Black Fire Fighters V. City of Akron. 81 F. 3d 161. (1996).
- Uniform Guidelines on Employee Selection Procedures. *Federal Register*, 43, (1978) pp. 38290 – 38315.
- Waisome v. Port Authority, 758 F. Supp. 171 (1991).

## Reducing Adverse Impact when Using an Aptitude Test

Neil Hauenstein  
Virginia Tech

### **Abstract**

Three strategies have been used to try and reduce the adverse impact associated with the use of g-loaded tests: (1) reducing race differences on measures of cognitive ability (e.g., DeShon, Smith, Chan, & Schmitt, 1998), (2) strategies that reduce the weight of the aptitude predictor relative to other predictors (e.g., Hattrup et. al., 1997), or (3) changing the interpretation of test scores via banding (e.g., Cascio, Outtz, Zedek, & Goldstein, 1991). None of these strategies have had much success reducing adverse impact, however, each strategy has been studied independent of the other two strategies. The purpose of the current study is to examine the latter two strategies in conjunction with each other.

**Opinions expressed in this report are those of the author and should not be construed to represent the official position of DEOMI, the Military Services, or the Department of Defense.**

### **Reducing Adverse Impact through the Aptitude Regression Weight**

There are two primary methods that have been used to reduce the weight assigned to the aptitude measure relative to other predictors. The most common strategy is to add predictors with little or no race effects to the prediction model in the hope that these added predictors will “water down” the adverse impact of the g-loaded predictor.

The second strategy, and the focus of this study, is based on the task performance-contextual performance distinction put forth by Borman and Motowidlo (1993). Task performance refers to the activities that directly support the organization’s technical core, whereas contextual performance refers to behaviors that support the organizational, social, and psychological environment in which the core must function (Borman & Motowidlo, 1993). This conceptual distinction has been supported empirically by results demonstrating that personality, especially facets of conscientiousness, is more strongly correlated with contextual performance measures than with measures of cognitive ability. Based on this dichotomy, Hattrup et al. (1997) simulated the effects of differentially weighting task and contextual performance on hiring decisions when using an aptitude measure and a personality measure. The fundamental logic of the Hattrup et. al (1997) study is that as the criterion becomes less related to g, the regression weight for g decreases relative to the weight assigned to the personality measure. The lower the standardized regression weight for aptitude, the lower the levels of adverse impact. However, based on the parameters of their simulation, they found that adverse impact was eliminated only when the selection ratios were very high (e.g., .80) and task performance received little or no weight in the criterion composite.

### **Changing the Interpretation of Predictor Scores via Banding**

The final strategy is to change the interpretation of predictor composite scores by the use of banding procedures, which results in individuals within a given range of scores as having equivalent standing on the predictor composite. The banding strategy recognizes that no selection measure has perfect reliability and, therefore, differences in test scores may not indicate true differences in ability but rather measurement imprecision (Cascio, et. al., 1991). In the typical application of test score banding, the reliability of a test is used to compute a standard error of the difference (SED), which is in turn multiplied by a confidence factor established by the Type I error rate that a researcher is willing to tolerate. For a given SED, the more conservative the Type I error rate, the narrower the bandwidth, and vice versa.

The banding of test scores using the SED strategy has shown the most promise in reducing adverse impact. However, SED banding has been, and continues to be, controversial. Nonetheless, at this point banding appears to be a legally defensible process for reducing adverse impact (*Van Pool v. San Francisco Fire Department*, 1996). For our purposes, we do not take a stand on the appropriateness or inappropriateness of SED banding procedures. What is important to us is that banding is the most promising of all the strategies used to reduce adverse impact. In the current study, we extend the



rationale of Hatstrup et al.'s study (1997) to examine the effect of differential criterion weighting when banding is also used.

### Method

We replicated the Monte Carlo simulation performed by Hatstrup et al. (1997) to examine the effectiveness of reducing adverse impact through criterion weighting strategies in combination with banding techniques.

#### Data Generation and Transformation

The correlation matrix (See Table 1) from Hatstrup et al. (1997, see pp. 658-659 for details) of the four variables (cognitive ability, work orientation, task performance, and contextual performance) was used to transform 10,000 cases of randomly generated data into standardized test scores and standardized criteria scores. In the final data set, 7,500 data points were labeled as members of the majority group, 2,500 were labeled as minority group members. To complete the simulated data, a value of 1.0 was added to the cognitive ability score and a 0.5 value was added to the task performance score of all 7,500 majority cases. These values represent the average one standard deviation difference between Whites and Blacks on cognitive ability test scores, and an average .5 standard deviation difference in overall performance between Whites and Blacks (Sackett & Wilk, 1994).

---

Table 1

*Matrix of Uncorrected Cumulated Correlations (Hatstrup et al., 1997)*

	1	2	3	4
Predictors				
1. Cognitive ability	--			
2. Work orientation	.07	--		
Criteria				
3. Task performance	.41	.12	--	
4. Contextual performance	.16	.26	.17	--

---

#### Criterion Weighting and Selection Ratios

Criterion composite scores were created by differentially weighting task and contextual performance scores. A total of five different task performance to contextual performance weighting schemes were used to create the composites: 1-0, 3-1, 1-1, 1-3, and 0-1 (where task performance was weighted by the first number and contextual performance was weighted by the second number). Each of these criterion composite scores was regressed separately onto cognitive ability and work orientation in order to derive standardized regression weights. For each applicant, these regression weights were then used to compute weighted composite predictor scores for each of the five

corresponding composite criteria. Thus, for a given applicant, five predictor composite scores were computed.

Adverse impact is profoundly affected by the selection ratio. Therefore, we used several different selection ratios in our simulation (.05, .20, .40, and .60).

### Banding Strategy

The problem with SED banding is that the bandwidth, and by extension adverse impact, is also dependent on the chosen Type I error rate. Therefore, instead of studying adverse impact based on a bandwidth determined by a given SED and a Type I error rate, we chose instead to study what happens when the banding strategy is used to eliminate adverse impact as defined by the four-fifths rule. In order to eliminate adverse impact, we used sliding bands, the most liberal banding strategy available. Sliding bands refers to the strategy of moving the first band down as the applicant with the highest predictor score in the band is hired. The logic of SED sliding bands is that once the top scorer in the first band is selected, the applicant with the score that is just below the lower bound of the first band may no longer be statistically different from the top score of the remaining applicants in the first band. Therefore, once the applicant with the highest predictor score is selected, the lower bound of the first band is reset from the highest predictor score of the applicants remaining in the pool. The band continues to slide down each time the applicant with the highest score on the predictor is hired.

### Selecting Within the Band

The rate at which adverse impact is reduced is also affected by the manner in which applicants are selected within the band. Diversity hiring refers to the practice of first hiring all minorities within the top band, and then second, hiring all majority applicants with the highest remaining predictor score, and then repeating this process as the band slides down the predictor score distribution until all positions are filled. This strategy maximizes the rate at which the band slides down the distribution of predictor scores, thereby maximizing the hiring of minority group members and maximizing the reduction of adverse impact. We recognize that diversity hiring is not an advisable strategy in an applied setting due to potential reverse discrimination charges; however, it is the most efficient strategy for hiring within the band to eliminate adverse impact, which was our goal for the simulation.

### Establishing Bandwidth

For every criterion-weighting scheme, we determined how wide a sliding band would have to be on the composite predictor score in order to produce a minority group selection ratio that was four-fifths the majority group selection ratio. For example, for our data, at the .05 selection ratio and 1-0 criterion weighting, the required bandwidth to eliminate adverse impact was the difference between the composite predictor score for the 394<sup>th</sup> highest-scoring majority-group member (i.e., the last majority group member hired) and the 106<sup>th</sup> highest-scoring minority-group member (i.e., the last minority-group

member hired). The 394<sup>th</sup> highest predictor composite score for a majority group member was 1.168, and .791 was the 106<sup>th</sup> highest score for a minority group member. Therefore, .377 was the raw score bandwidth necessary to eliminate adverse impact.

### Variables of Interest

First, in order to compare our results to Hattrup et al. (1997), we examined the adverse impact ratios when using strict top-down hiring.

Second, we assessed the practical issue of how many majority group members are bypassed (i.e., not hired even though their raw scores on the predictor composite is greater than the raw score of the last minority group member hired) in the banding solutions. We measured this “bypass” variable as a percent difference operationalized as the percentage of the 7,500 majority applicants in composite predictor score distribution whose scores on the composite predictor fell between the last majority group hire and the last minority group hire. The interpretation of these percent differences was based on relative comparisons among the different selection ratio-criterion weighting scenarios, with smaller percent differences being better than larger percent differences.

Finally, performance decrements are always an issue when utilizing strategies to increase diversity (Hattrup et al., 1997). Therefore, for a given selection ratio and criteria-weighting scheme, we compared the average criterion performance of the group that would be hired under top-down selection to the average standardized criterion performance of the group that would be hired when using the banding solution. The performance estimates were standardized within each criterion-weighting scenario. From these data, we computed performance change by *dividing* the average standardized performance for those selected using the banding strategy by the average standardized performance of those selected using top-down selection. As such, performance ratios less than one represent performance decrements from using the banding solution and performance ratios greater than one represent increases in performance as a function of the banding solution.

## **Results**

Starting with the initial regression analyses (See Table 2), the amount of variance in performance accounted for is greatest for the 3-1 criterion-weighting scenario, followed closely by the 1-0 and 1-1 scenarios. Total variance accounted for drops off precipitously for the 1-3 and 0-1 scenarios. These results are comparable to Hattrup et al. (1997). Closer examination of the regression weights indicates that the standardized regression weight for the aptitude measure decreases steadily as the weight given to contextual performance in the criterion composite increases. For the work orientation personality measure, the opposite trend occurs in that the standardized regression weight increases as the weighting of contextual performance increases, except that there is no change for the work orientation regression weight between 1-3 and 0-1. These patterns demonstrate that the manner in which the differential weighting of task performance and

contextual performance reduces adverse impact is by reducing the magnitude of the aptitude measure.

Table 2

*Standardized Regression Weights for the Regression of Criterion Composites onto Cognitive Ability and Work Orientation*

Predictor	Criterion composite weighting scheme				
	1-0	3-1	1-1	1-3	0-1
Work orientation	0.443	0.439	0.373	0.245	0.12
Cognitive ability	0.081	0.152	0.225	0.263	0.263
$R^2$	0.207	0.225	0.201	0.138	0.088

#### Adverse Impact Ratios Using Top-down Selection

Results for strict top-down hiring indicate adverse impact for all selection ratios and all criterion-weighting scenarios (See Table 3). This is similar to what Hattrup et al. (1997) found and reinforces the conclusion that differential criterion weighting by itself will not extensively eliminate adverse impact as defined by the four-fifths rule. Obviously, irrespective of the criterion-weighting scenario, adverse impact improves as the selection ratios increase.

Table 3

*Adverse Impact Ratios under Top-down Selection, Percent of Majority Applicants Bypassed When Hiring Decisions are Made Using Banding, and the Effects of Hiring Strategy (i.e., Top-down versus Banding) on Job Performance.*

Selection Ratio		Criterion-Weighting Scenario				
		1-0	3-1	1-1	1-3	0-1
.05	Top-down AI <sup>a</sup>	0.125	0.165	0.198	0.326	0.538
	% Difference <sup>b</sup>	18	14	12	8	2
	Performance Ratios <sup>c</sup>	0.944	0.988	1.007	1.008	1.015
.20	Top-down AI	0.228	0.235	0.300	0.413	0.632
	% Difference	28	25	20	15	6
	Performance Ratios	0.950	0.963	0.968	0.994	1.025
.40	Top-down AI	0.343	0.367	0.422	0.521	0.700
	% Difference	29	26	22	16	6
	Performance Ratios	0.959	0.975	0.997	0.996	1.035
.60	Top-down AI	0.482	0.509	0.557	0.640	0.777
	% Difference	20	19	16	11	1

Performance Ratios	0.973	0.971	0.979	1.003	1.011
--------------------	-------	-------	-------	-------	-------

<sup>a</sup>Adverse impact ratio for top-down selection. Values < .8 indicate violation of the four-fifths rule.

<sup>b</sup>When using the banding strategy to make hiring decisions, the percentage of majority applicants not hired in spite of the fact that they had higher composite predictor scores than the last minority group member hired.

<sup>c</sup>Average performance of applicants hired using banding *divided* the average performance of applicants hired using top down selection.

#### Percent of Majority Group Bypassed by the Use of Banding to Make Hiring Decisions

For the percent difference measure that indicates the extent to which majority group members are bypassed, smaller percentages are better than larger percentages. Due to the normal distribution assumptions of all measures, it is not surprising the percent difference is smaller for the .05 and .60 selection ratios, and larger for the .20 and .40 selection ratios. Furthermore, as the criterion-weighting goes from 1-0 to 0-1, the percent differences decrease.

#### Average Performance Differences Between Applicants Hired Using Top-down Hiring versus Applicants Hired Using Banding

Relative performance decrements (i.e., the smaller performance ratios) for the groups hired using the banding solution tended to be greatest when task performance was heavily weighted (i.e., 1-0 or 3-1); however, starting at the 1-1 criterion weighting, the performance ratio for many of the criterion weightings was close to one, and the performance ratio at a .05 selection ratio was greater than one (i.e., the applicants hired under the banding solution outperformed those hired under the top-down strategy). This trend continued for the 1-3 and 0-1 weighting schemes, where there were many combinations of selection ratios and criterion weights for which the performance ratio was greater than one.

### **Discussion**

Perhaps no other issue in personnel selection is as complex as the trade-off between maximizing performance and increasing workforce diversity. As Murphy states in Campion, Outtz, et. al., Guion (2001): "Traditionally, organizations and I-O psychologists have been content to make broad meaningless statements (e.g., this organization values diversity) without coming to grips with the difficult question of how much value is attached to criteria of this sort, or why" (p. 161). Within the constraints of the simulation parameters, the current study presents data that exemplifies the difficult choices to be made when weighing diversity goals against maximizing performance.

Like Hattrup et al. (1997), this study reinforces the fact that race effects in the criterion used in validation studies of test batteries that include an aptitude measure affect the magnitude of adverse impact. The effects of differential criterion weighting on reducing the aptitude regression weight are negligible when using top-down selection and when the criterion favors task performance over contextual performance, but the effects on the aptitude regression weight become more meaningful when task performance and contextual performance receive equal weighting. Furthermore, placing greater weight on contextual performance combined with a banding strategy facilitates the reduction of adverse impact, resulting in greater workforce diversity while not necessarily sacrificing criterion performance to a great extent. Though the exact banding strategy used in this study cannot be used in practice, nonetheless, it appears that if a SED banding strategy is used, there will at least be practically significant improvement in adverse impact results when the criterion is comprised of task performance and contextual performance, and contextual performance is given at least equal weight in the criterion composite.

In conclusion, we have demonstrated that a composite criterion that gives at least 50 percent of the weight to contextual performance improves diversity without necessarily causing great sacrifices in performance. The improvement in adverse impact attributable to differential criterion weights will increase if a banding solution that produces reasonably wide bands (e.g., SED banding) is also used.

### Bandwidth Issues

Regardless of whether fixed bands or sliding bands are used, a major issue is what establishes a reasonable bandwidth. Even opponents of SED banding readily admit that banding (e.g., expectancy charts) are often used in personnel selection (Campion et al., 2001). The real issue is the manner in which the bandwidth is established. For those who favor SED banding, the most accepted standard is to use two times the SED (e.g., Murphy et al., 1994), a procedure to which opponents to SED banding take great exception (see Schmidt and Kehoe's comments in Campion et al., 2001). Our purpose is not to take a stand in favor or against using SED banding. Our point is that regardless of how the bandwidths are established, if the bands have a 'reasonable' width, there will likely be some meaningful improvement in adverse impact when contextual performance is given at least half the weight in the composite criterion. As Guion (1998) points out, the justification for an acceptable bandwidth is as much a judgmental process as a statistical one. He even argues that it is acceptable to adjust the bandwidth within the distribution of test scores to deal with the predictor composite distributional scores that we encountered between the .2 and .4 selection ratios. By narrowing the bandwidth at these selection ratios, the problem of the high percentage of majority group members being bypassed would diminish.

Regarding the issue of bypassed majority group members, evaluations of banding solutions often focus on the width of the bands as the major evaluative criterion. Beyond bandwidth, we recommend that the percentage of bypassed majority group members (i.e., our percent difference measure) also be considered as a major criterion. As our

simulation demonstrates, when some type of diversity consideration is used to hire within the band, the percentage of majority group members bypassed for a given bandwidth will depend on where the lower end of the band falls on the distribution of the predictor scores for the majority group. Most importantly, if the predictor score distribution is normally distributed, the percent of bypassed majority group members will be relatively small, even when using a wide bandwidth, if the selection ratio is small. In contrast, for a given bandwidth and assuming a normal distribution of predictor scores, the percentage of majority group members bypassed will be maximized for the selection ratio that corresponds to the 50<sup>th</sup> percentile on the majority predictor score distribution. From a practical perspective, it is clear that the issue of percent of majority group members bypassed is just as important as the bandwidth.

In summary, differential criterion weighting by itself will not eliminate adverse impact in most situations, but it does meaningfully reduce adverse impact when contextual performance is given at least equal weight with contextual performance (assuming that contextual performance has small to negligible ratee race effects). Moreover, the benefits of using differential criterion weighting increases significantly when combined with a banding solution that establishes a reasonably wide bandwidth.

## References

- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, & W. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Campion, M., Outtz, J., Zedeck, S., Schmidt, F., Kehoe, J., Murphy, K., & Guion, R. (2001). The controversy over score banding in personnel selection: Answers to 10 key questions. *Personnel Psychology*, 54, 149-176.
- Cascio, W. F., Outtz, J., Zedeck, S., & Goldstein, I. L. (1991). Statistical implications of six methods of test score use in personnel selection. *Human Performance*, 4, 233-264.
- DeShon, R. P., Smith, M. R., Chan, D., & Schmitt, N. (1998). Can racial differences in cognitive test performance be reduced by presenting problems in a social context? *Journal of Applied Psychology*, 83, 438-451.
- Guion, R. (1998). Assessment, Measurement, and Prediction for Personnel Decisions. Mahwah, New Jersey: Erlbaum.
- Hattrup, K., Rock, J., & Scalia, C. (1997). The effects of varying conceptualizations of job performance on adverse impact, minority hiring, and predicted performance. *Journal of Applied Psychology*, 82, 656-664.
- Sackett, P. R., & Wilk, S. L. (1994). Within-group norming and other forms of score adjustment in pre-employment testing. *American Psychologist*, 49, 929-954.
- Van Pool v. San Francisco Fire Department, No. 94-16089 (U S App 1996).



## COMPARING COMPUTERIZED-BASED AND PAPER-PENCIL VERSIONS OF THE DEOCS

Stephen A. Truhon  
Winston-Salem State University

### **Abstract**

The process of updating the Military Equal Opportunity Climate Survey (MEOCS) has resulted in a new version called the DEOCS (DEOMI Equal Opportunity Climate Survey), which uses items from the MEOCS-EEO (Equal Employment Opportunity) version. The DEOCS has been presented in both paper-and-pencil (P&P) and on-line (OL) versions. A three-step process to compare items from the two versions was performed: 1) analysis of difficulty and discriminability through item response theory; 2) linking these analyses through the use of a common scale; and 3) examination of differential item functioning (DIF) and differential test functioning (DTF). DIF was found in two items, but overall differences were small. No DTF was found for any scale. The two versions of the DEOCS appear to have measurement equivalence.

**Opinions expressed in this report are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## COMPARING COMPUTERIZED-BASED AND PAPER-PENCIL VERSIONS OF THE DEOCS

Stephen A. Truhon  
Winston-Salem State University

### Introduction

During the past 20 years the use of computerized testing has increased dramatically. It is considered to be cheaper; it can be done more quickly; and it can provide richer information (Simsek & Veiga, 2000). Some researchers have proposed that Internet surveys have a lower rate of missing data (Schmidt, 1997; Stanton, 1998).

In comparing two media of presentation of the same test, the type of test used is worth considering. Most of the work on computerized testing has been done with tests of cognitive ability. In a meta-analysis Mead & Drasgow (1993) found the correlation between scores on computerized and paper-and-pencil ability tests to be quite high. They noted that for power tests the correlation is .97 but for speeded tests it was .72. They attributed this difference to the importance of motor skills in speeded tests. More recent studies have reached similar conclusions (but see Van de Vijver & Harsveld 1994).

The results on comparing noncognitive tests have been somewhat mixed but tend to favor no difference. Part of the problem in comparing computerized with paper-and-pencil versions of noncognitive (as well as cognitive) tests is determining what is meant by equivalence. Many studies have compared the means of the two tests and report whether there is a difference. However, two tests can have similar means and not be equivalent. Likewise two equivalent measures can have different means. Other studies have gone further by comparing correlations.

King and Miles (1995) were among the first to suggest that confirmatory factor analysis was needed to establish the equivalence of tests employing different media of presentation. They found measurement equivalence for four work-related measures. Others (e.g., Church, 2001) have also found measurement equivalence in comparing computerized and paper-and-pencil tests.

Although Van de Vijver and Harsveld (1994) found a lack of measurement equivalence through the use of confirmatory factor analysis, they urged the use of techniques from item response theory (IRT) such as differential item functioning (DIF) to provide more detailed analysis. A few researchers have followed their suggestion.

Donovan, Drasgow, and Probst (2000) applied Raju, van der Linden, & Fleer's (1995) analysis of DIF and differential test functioning (DTF) to computerized and paper-and-pencil administrations of the Job Descriptive Index. While they found a few items with DIF, there was

no DTF. Penny (2003) used the same approach with 360-degree assessments of employees. He also found a few items displaying DIF but concluded they were of slight importance.

A major research project for the Defense Equal Opportunity Management Institute (DEOMI) has been the development and testing of the Military Equal Opportunity Climate Survey (MEOCS) (Dansby & Landis, 1991). This project includes revising the MEOCS and keeping it up to date. Suggested revisions to the MEOCS have included shortening it and making its items more neutral (i.e., replacing references to “majority,” “minority,” “men,” and “women” with more general terms “race” and “gender” and then using demographic information to determine the respondent’s specific race and gender).

The process of updating the MEOCS has resulted in a new version called the DEOCS (DEOMI Equal Opportunity Climate Survey), which uses items from the MEOCS-EEO (Equal Employment Opportunity version). Truhon (2003) found little evidence of DIF in comparing these two versions. In circumstances where there was DIF, the DEOCS had superior psychometric properties compared to their versions in the MEOCS-EEO.

The DEOCS has been presented in both paper-and-pencil (P&P) and on-line (OL) versions. The current study sought to determine whether DIF and DTF existed between the two versions using techniques from IRT.

## **Method**

### **Participants**

A P&P version of the DEOCS had been administered to 520 personnel in 2003 (Truhon, 2003). In 2003-2004 an OL version of the same instrument was administered to three groups: members of the staff of the Joint Chiefs of Staff, (n = 1373), members of DEOMI (n = 76) and members of the Washington Air National Guard (n = 298).

### **Materials**

The DEOCS consists of 63 items. Fifty-one of these items had been taken from 14 scales from the MEOCS-EEO and revised for the DEOCS: Sexual Harassment and Discrimination, Differential Command Behavior toward Minorities and Women, Positive Equal Opportunity (EO) Behavior, Racist Behavior, Religious Discrimination, Disability Discrimination, Age Discrimination, Commitment, Trust in the Organization, Effectiveness, Work Group Cohesion, Leadership Cohesion, Satisfaction, and General EO Climate. Each scale consists of two to five items which previous research had shown to have good psychometric qualities. The wording of the items in the P&P and OL versions was the same.

## Results

A three-step process was followed in these analyses. First, Thissen, Chen, and Bock's (2003) MULTILOG program was used below to obtain difficulty and discriminability parameters ( $a$  and  $b$ 's) for the items from the DEOCS P&P and OL versions. These parameters are calculated independently. A common metric was needed then to compare them. Second, Baker's (1995) EQUATE program was thus used to link the two versions. For each of the scales presented below the parameters from the DEOCS P&P were equated to those of the DEOCS OL. The transformation constants ( $A$  and  $K$ ) are also presented. Finally, following the transformation, DIF analyses were performed using Raju et al.'s (1995) DFIT program adapted for polytomous items (Flowers, Oshima, & Raju, 1999).

The major finding here was that the vast majority of items show little sign of DIF. The mean value of the DIFs was .020; the median value was .001. As can be seen in Table 1, only three items (DEOCS 20, DEOCS 26, and DEOCS 27) exceeded Raju et al.'s (1995) critical value of .096 and two approached it. With this information and information from previous research (Truhon, 2003), the DEOCS is comparable to the MEOCS and should be put online.

Table 1. Items from the DEOCS Showing Differential Item Functioning

<b><u>Test Item</u></b>	<b><u>C Dif</u></b>	<b><u>NC Dif</u></b>
DEOCS 20	.034	.098
DEOCS 26	.014	.485
DEOCS 27	.009	.177

DEOCS 20. An older individual did not get the same career opportunities as did a younger individual.

DEOCS 26. I am proud to tell others that I am part of this organization.

DEOCS 27. There's not too much to be gained by sticking with this organization until retirement (assuming I could do so if I wanted to).

## Discussion

While putting the MEOCS on line is an important step, it is also a first step. What has been done here is merely place a paper-and-pencil on computer (what is called a computer-based test [CBT]). While this may lead to improvements in test administration, such as faster assessment times, flexibility in manipulating items, and the ability to provide immediate feedback to respondents (Alkhadher, Clarke, & Anderson, 1994), this approach does not take full advantage of the computer. Another approach is to employ a computerized adaptive test (CAT). CATs have been primarily used in ability testing, but there have been applications to attitude testing (Koch, Dodd, & Fitzgerald, 1990).

If the DEOCS were to be developed into a CAT form, it would be useful to start with the DEOCS in CBT form. There would be several practical issues to be met to make the next steps (Wise & Kingsbury, 2000). The first step is establishing a pool of items. Previous research on the MEOCS, in its various forms, has resulted in almost 200 items for which detailed statistics have been calculated. Usually a large item pool is necessary, but Dodd, de Ayala, and Koch (1995) found that, when using polytomously scored items, a smaller pool is needed.

In administering a CAT, the first concern is which item to present first. In ability tests this usually means picking an item of middle difficulty. In this case the computer would display an item in the middle of the latent trait (i.e., an item which about 50% of respondents rate it at or above the midpoint of the scale). The next item chosen is based on the response to the first item: If the response is at or above the midpoint, the computer displays an item that fewer respondents (e.g., 25%) rate highly; if it is below the midpoint, the computer displays an item that more respondents (e.g., 75%) rate highly. The process repeats itself until a predetermined number of items have been presented or a stopping rule has been satisfied. This process can be repeated within a test when the test consists of several sets or scales of items.

CAT can provide additional benefits. A test is often viewed as a static object. Once sufficient items with acceptable psychometric qualities are established, a test can come into existence. It typically remains the same way until it goes out of favor or researchers note problems with the test.

Yet a test is dynamic. The concept it is measuring can change or the items that are part of the test can change in meaning. New items may be needed for these and other reasons. After pretesting these items in paper-and-pencil form they can be administered online with older existing items. Afterward these new items can be calibrated by linking procedures such as EQUATE (Baker, 1995).

The transfer from paper-and-pencil test to CAT can occur without loss of information. One Study (Alkhadher, Clarke, & Anderson, 1998) found that paper-and-pencil and computerized adaptive versions of the same test were equivalent. This equivalence can be met with fewer items: it is not unusual to use 50% or less of the items from the paper-and-pencil test in CAT (Alkhadher et al., 1998). This holds promise for the DEOCS.

## References

- Alkhadher, O., Clarke, D. D., & Anderson, N. (1994). Computer-Based Testing: A Review of Recent Developments in Research and Practice. *European Work and Organizational Psychologist*, 4, 169-187.
- Alkhadher, O., Clarke, D. D., & Anderson, N. (1998). Equivalence and Predictive Validity of Paper-and-Pencil and Computerized Adaptive Formats of the Differential Aptitude Tests. *Journal of Occupational and Organizational Psychology*, 71, 205-217.
- Baker, F. B. (1995). *EQUATE 2.1: A Computer Program for Equating Two Metrics in Item Response Theory* [Computer program]. Madison: University of Wisconsin, Laboratory of Experimental Design.
- Church, A. H. (2001). Is There a Method to our Madness? The Impact of Data Collection Methodology on Organizational Survey Results. *Personnel Psychology*, 54, 937-969.
- Dansby, M. R., & Landis, D. (1991). Measuring Equal Opportunity Climate in the Military Environment. *International Journal of Intercultural Relations*, 15, 489-505.
- Dodd, B. G., de Ayala, R. J., & Koch, W. R. (1995). Computerized Adaptive Testing with Polytomous Items. *Applied Psychological Measurement*, 19, 5-22.
- Donovan, M. A., Drasgow, F., & Probst, T. M. (2001). Does Computerizing Paper-and-Pencil Job Attitude Scales Make a Difference? New IRT Analyses Offer Insight. *Journal of Applied Psychology*, 85, 305-313.
- Flowers, C. P., Oshima, T. C., & Raju, N. S. (1999). A Description and Demonstration of the Polytomous-DFIT Framework. *Applied Psychological Measurement*, 23, 309-326.
- King, W. C., & Miles, E. W. (1995). A Quasi-Experimental Assessment of the Effect of Computerizing Noncognitive Paper-and-Pencil Measurements: A Test of Measurement Equivalence. *Journal of Applied Psychology*, 80, 643-651.
- Koch, W. R., Dodd, B. G. & Fitzpatrick, S. J. (1990). Computerized Adaptive Measurements of Attitudes. *Measurement and Evaluation in Counseling and Development*, 23, 20-30.
- Mead, A. D., & Drasgow, F. (1993). Equivalence of Computerized and Paper-and-Pencil Cognitive Ability Tests: A Meta-Analysis. *Psychological Bulletin*, 114, 449-458.
- Penny, J. A. (2003). Exploring Differential Item Functioning in a 360-Degree Assessment: Rater Source and Method of Delivery. *Organizational Research Methods*, 6, 61-79.

- Raju, N. S., van der Linden, W. J., & Fleer, P. F. (1995). IRT-Based Internal Measures of Differential Functioning of Items and Tests. *Applied Psychological Measurement, 19*, 353-368.
- Schmidt, W. C. (1997). World-Wide Web Survey Research: Benefits, Potential Problems, and Solutions. *Behavior Research Methods, Instruments & Computers, 29*, 274-279.
- Simsek, Z. & Veiga, J. F. (2000). A Primer on Internet Organizational Surveys. *Organizational Research Methods, 4*, 218-235.
- Stanton, J. M. (1998). An Empirical Assessment of Data Collection Using the Internet. *Personnel Psychology, 51*, 709-725.
- Thissen, D., Chen, W-H, & Bock, R.D. (2003). *Multilog (version 7)* [Computer software]. Lincolnwood, IL: Scientific Software International.
- Truhon, S. A. (2003, November). DEOCS: A New and Improved MEOCS. Paper presented at the 45<sup>th</sup> Annual Conference of the International Military Testing Association. Pensacola, FL. (Published in *Proceedings of the 45<sup>th</sup> Annual Conference of the International Military Testing Association*, pp. 766-771).
- Van de Vijver, F. J. R., & Harsveld, M. (1994). The Incomplete Equivalence of the Paper-and-Pencil and Computerized Versions of the General Aptitude Test Battery. *Journal of Applied Psychology, 1994*, 852-859.
- Wise, S. L., & Kingsbury, G. G. (2000). Practical Issues in Developing and Maintaining a Computerized Adaptive Testing Program. *Psicológica, 21*, 135-155.

# How the U.S. Military's Equal Opportunity Training Program Impacts Operational Readiness and Effectiveness: An Exploratory Study

James R. Camic and Robert M. McIntyre  
Old Dominion University

## **Abstract**

The Department of Defense is dedicated to creating an environment that recognizes individuals' diverse backgrounds. The Defense Equal Opportunity Management Institute (DEOMI) was developed to train equal opportunity advisors (EOAs), implement training programs at the unit level, and evaluate the equal opportunity climate of the military. Many of the programs developed at DEOMI were developed with the belief that diversity appreciation and prejudice avoidance (DAPA) lead to combat readiness and operational effectiveness (CROE).

A qualitative, grounded theory approach was employed to help understand how DAPA is related to CROE. Interviews were conducted with retired EOAs in which they related critical incidents involving discrimination or prejudice. The results from the qualitative analysis indicate that incidents of discrimination and prejudice elicit emotional responses from all individuals involved. The negative emotions as a result of the incident lead to negative attitudes toward the unit and the military in general which then, in turn, impact the individual's performance. Factors such as leadership and trust in the organization appear to moderate the effect of attitudes on performance. A model is developed to show the relationship between the constructs discovered during the analysis and methods for future studies are discussed.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**



## Equal Issues: EO Initiatives and Measuring Effectiveness

D. L. McKay  
Naval Service Training Command

B. Krain  
Human Performance Center, Great Lakes Naval Station

### **Abstract**

Throughout its history, the United States Navy has been very successful in attracting and retaining American citizens to serve as sailors. Furthermore, Navy leadership has put forth a concerted effort to ensure force composition reflects the society from which they were recruited. Today, 38.3% of active duty sailors are from minority groups, and 14.5% of active duty sailors are women (DEOMI, March 2004). These demographics demonstrate that the Navy is successful in attracting and retaining minority and female sailors; however, comparisons between the composition of officer and enlisted ranks reveal a demographic disparity. Minorities compose 19.5% of the officer corps, whereas 42% of enlisted personnel are minorities (DEOMI, March 2004). Additionally, minorities are underrepresented in technical ratings such as electronics technician, and over represented in administrative ratings such as storekeeper. The Navy is attacking these issues through a number of initiatives. This presentation addresses initiatives being pursued by Naval Service Training Command. In addition, presenters will ask the research community to assist in addressing these issues in closing the gap between officer and enlisted representation.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

# Diversity in the Workplace: Tolerance through Awareness

Steven Barzal, M.P.A  
U.S. Navy

## Abstract

This paper details how, in an era of economic belt-tightening, perceived “soft” programs such as diversity management are often forced to suffer budget cuts or are merely paid lip service as a business imperative. While not intended as a chapter by chapter guide, it explores diversity development and how it affects the workplace and particular ethnic groups. Several companies and organizations that have made significant strides in diversity management that apply to private, public, and military sectors are discussed in detail.

Increasing global competition for customers as well as for our workforce will necessitate recruitment from a pool of “non-traditional” employees. Managerial competence in attracting, retaining, and managing a highly diverse workforce will become critically important to all organizations.

The following sections are explored: defining diversity, gender diversity, ethnic diversity, African Americans, Latino Americans, Asian Americans, managing diversity at Xerox Corp., diversity in the U.S. Navy, and the White male. The author gives an historical background to allow the reader a perspective on past policies and perceptions while offering examples of innovations that have proven successful.

The author includes a section on affirmative action as a product of the civil rights movement that sought to redress the countries’ history of racial and sexual discrimination. The business imperative of enhancing diversity is discussed as a palatable alternative to the often highly-charged affirmative actions programs that have proven divisive to our society. Sensitivity to minority groups and the view from the majority present a balanced perspective to spur the ongoing debate about diversity beyond mere rhetoric. It is the author’s intent that all readers will gain an increased tolerance through awareness.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## Expressions and Perceptions – Examining Written Comments on the DEOMI Equal Opportunity Climate Survey (DEOCS)

Gene Murray, Ph.D.  
Grambling State University

### **Abstract**

Respondents to the Defense Equal Opportunity Management Institute (DEOMI) Equal Opportunity Climate Survey (DEOCS) are provided an opportunity to write comments about their units' equal opportunity climate and/or organizational effectiveness. Comments provide feedback commanders can use in guiding their units. Before units started completing the DEOCS online, very few personnel wrote comments. The number of written comments has greatly increased since DEOCS became available online. The purpose of this study was to examine written comments from four various-sized units and to align the comments with the 14 factors of the DEOCS, seeking to detect patterns. By sifting through the written responses, one might ascertain concerns and perceptions of respondents and take a snapshot of the environment or equal opportunity climate. A total of 193 responses were examined, using key word searches to determine which factors the responses fit. To search for more replies and process the sorting more accurately, three sorters read and categorized the 193 responses. Some respondents' comments fit into more than one category, so they were counted more than once. Some comments did not pertain to any of the 14 factors, so the comments were not attributed to any category. The same three-person panel, composed of a university professor and two graduate students, determined if statements were positive or negative. An examination of DEOCS comments can be useful for commanders to identify possible problem areas and get a clearer picture of the units' climate.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

# How do ROTC Cadets Acquire and Recall Information about Equal Opportunity Issues?

Gene Murray, Ph.D.  
Grambling State University

## Abstract

A questionnaire was administered to Air Force Reserve Officer Training Corps (ROTC) cadets at three southern universities to ascertain how they receive information about equal opportunity programs. The questionnaire also was answered by an equal number of non-cadet students, and their responses were compared.

Some findings include:

- Most ROTC cadets acquire their information from the news media and ROTC classes.
- Most cadets and other students are not familiar with complaint procedures on their campuses.
- Many students stated they were unsure how sexual harassment levels in the military compare to civilian life.
- ROTC cadets are more knowledgeable about basic equal opportunity information than their non-cadet counterparts.
- There were no significant differences between the basic knowledge levels of African Americans and Caucasians.
- Females wrote more precise definitions than males.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

Fleet Perceptions of Sexual Assault  
and the Sexual Assault Victim Intervention Program  
in the U.S. Navy

Carol E. Newell, M.A.  
Kimberly P. Whittam, Ph.D.  
Zannette A. Uriell, M.A.  
U.S. Navy

**Abstract**

The Navy established the Sexual Assault Victim Intervention (SAVI) program in 1994 as a result of a Navy Women's Study Group that addressed a number of issues, including sexual assault awareness, prevention and victim assistance. While studies have been conducted on SAVI program users, up to 2004, a Navy-wide investigation of perceptions of the program had not been conducted. The Navy Personnel Research, Studies, and Technology Department conducted an Internet survey of Navy active duty personnel on this issue.

For the present study, a random, stratified, cluster sample of 6,028 Navy personnel were selected to complete a survey on knowledge and awareness of the SAVI program, SAVI training attendance, and perceptions of SA in the Navy. Participants were contacted via the Navy Message System and asked to complete a short Internet poll on the SAVI program. Two-thousand six individuals completed the poll, yielding a 33% response rate. The study results were statistically weighted to match the paygrade and gender distribution of the Navy.

The study results indicate that most are aware of the SAVI program and know the SAVI point of contact at their command. The majority also indicated that they had attended SAVI training in the last year. In terms of SA perceptions, nearly all know what actions are considered SA, believe it is not tolerated at their command, and feel free to report SA. However, approximately half of women believe SA is a problem in the Navy.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

## Cultural and Gender Sensitivity in Navy and Marine Corps Personnel: Preliminary Analyses of Self Report Data from Two Ships

Portia Rawles, Psy.D.  
Fernando Garzon, Psy.D.  
David Brown, M.A.  
Regent University

### **Abstract**

The Navy and Marine Corps have surveyed their equal opportunity climate; however, no study of self reported cultural and gender sensitivity levels amongst personnel are found in their declassified literature. This unofficial Navy study utilized an exploratory survey design (N = 458) to gather such information and to identify variables predictive of diversity sensitivity in this population. The survey used the Quick Discrimination Index, the Marlowe Crown Social Desirability Scale, and a demographic questionnaire on a convenience sample of personnel from two ships. Hierarchical regression analysis suggested that race and gender were key variables predicting sensitivity levels, specifically with White males showing the lowest amount of sensitivity and non-White women showing the highest. Limitations of these findings are considered.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

# The Navy Officer Survey: Perceptions about Diversity, Mentoring, and Career Issues

Paul Rosenfeld

Carol Newell

Zannette A. Uriell

Evangeline Clewis

Michelle Bossart

Navy Personnel Research, Studies, and Technology Department  
Millington, TN

## Abstract

Since 1989, the Navy has assessed equal opportunity (EO) climate and sexual harassment (SH) issues through the biennial Navy Equal Opportunity/Sexual Harassment (NEOSH) Survey. Following the last administration of the NEOSH Survey in 2002, the Navy began the development of a strategic diversity framework that sought to align Navy diversity efforts with those best practices successfully used in civilian sector organizations. Because the NEOSH focused on EO and SH issues, there was a need to modify this assessment instrument to include measures of diversity and related areas such as mentoring. The initial transition from EO/SH to diversity assessment was accomplished through the 2004 Navy Officer Survey. A random sample of about 11,000 active-duty naval officers was asked to complete the Navy Officer Survey on the Internet. The response rate was 37%. The survey asked about a range of career issues and included the first extensive sections on both diversity and mentoring in a Navy-wide personnel survey. The results indicated widespread satisfaction across a range of career issues assessed on the survey. Mentoring is commonplace but just over half are satisfied with mentoring received. About three-fourths or more of officers are aware of Navy's diversity efforts, support them, and have a good idea of what diversity means, but one-half or less are personally committed to diversity or have actively supported Navy's efforts. These results provide a good baseline against which the success of future Navy diversity efforts can be measured.

**Opinions expressed in this abstract are those of the authors and should not be construed to represent the official position of DEOMI, the military Services, or the Department of Defense.**

---

<sup>1</sup> While men as well as women can experience sexual harassment, research to date indicates women are the more likely targets.

<sup>2</sup> Many authors refer to “triple jeopardy” referring to the interactions of race, class and gender.

<sup>3</sup> Because the questions used in the 2002 survey were not an exact match to the questions from the original 1988 survey, our conceptualizations for individual and environmental harassment are a broad match, but not an exact match of our earlier research. For a description of the statements classified as individual or environmental harassment, see Firestone and Harris, (1994).

<sup>4</sup> Lofland, John. 2000 “Shades of Gay,” *Newsweek*, March 20: 46-49. Sherrill, Kenneth and Yang, Alan. 2000. “From Outlaw to Inlaw, Anti-Gay Attitudes Thaw.” *Public Perspective*. Seltzer, Richard. 1992. “The Social Location of Those Holding Antihomosexual Attitudes.” *Sex Roles*. 26:391-398.

<sup>5</sup> Swan, Wallace and Mazur, Paul. 2002. “Developing a Paradigm for worldwide Gay, Lesbian, Bisexual, and Transgender Public Policy and Administration,” International Journal of Public Administration 25(1): 5-12.

<sup>6</sup> Sherrill and Yang, “Anti-Gay Attitudes Thaw.” Seltzer, “Antihomosexual Attitudes.”

<sup>7</sup> Belkin, Aaron and Embser-Herbert, Melissa Sheridan, 2002. “A Modest Proposal; Privacy as a Flawed Rationale for the Exclusion of Gays and Lesbians from the U.S. Military,” *International Security* 27(2): 178-197.

<sup>8</sup> Wolinsky and Sherrill, “Gays and the Military,” Mazur, Paul. 2002. “Gay and Lesbian Rights in Canada: A Comparative Study” International Journal of Public Administration 25(1): 45-62.

<sup>9</sup> Scott, Wilber J. and Sandra Carson Stanley, 1994. Gays and Lesbians in the Military: Issues, Concerns, and Contrasts, Hawthorne, NY: Walter De Gruyter.

<sup>10</sup> Burrelli, David F. 1994. *An Overview of the Debate on Homosexuals in the U.S. Military*. In Wilber J Scott and Sandra Carson Scott (Eds.) Gays and Lesbians in the Military: Issues, Concerns, and Contrasts. New York: Walter de Gruyter, Inc.

<sup>11</sup> Burrelli, “An Overview of the Debate on Homosexuals in the U.S. Military.”

<sup>12</sup> Scott and Carson Stanley “Gays and Lesbians in the Military: Issues, Concerns, and Contrasts.”

<sup>13</sup> Burrelli, “An Overview of the Debate on Homosexuals in the U.S. Military.”



---

<sup>14</sup> Wolinsky and Sherrill, "Gays and the Military."

<sup>15</sup> Rosen, et al. (1999) in a meta-analysis across five studies and found consistent, albeit small, negative correlations between unit cohesion and percentage of women.

<sup>16</sup> Harrell, M.C. and L. L. Miller, 1997, *New Opportunities for Military Women; Effects Upon Readiness, Cohesion, and Morale*, Washington, D.C.: Rand National Defense Research Institute; Rosen, L.N., P. D. Bliese, K. A. Wright, and R. K. Gifford, 1999, "Gender Composition and Group Cohesion in U.S. Army Units: A Comparison across Five Studies," *Armed Forces & Society* 25 (3): 3650386; Segal, M. 1995. "Women's Military Roles Cross-Nationality, Past, Present, and Future," *Gender Society* 96 757-775.

<sup>17</sup> See for example, Barret, F. J. (1996). "The Organizational Construction of Hegemonic Masculinity: The Case of the U.S. Navy," *Gender, Work and Organization* 3(3): 129-142; Herbert, M. S. (1999). *Camouflage Isn't Only for Combat: Gender, Sexuality and Women in the Military*. New York: New York University Press; Mumby, D. K. (1998). "Organizing Men: Power, Discourse, and the Social Construction of Masculinity(s) in the Workplace," *Communication Theory* 8: 164-183.

<sup>18</sup> Gruber, J. E. & Bjorn, L., 1986. "Women's Responses to Sexual Harassment: An Analysis of Sociocultural, Organizational and Personal Resource Models," *Social Science Quarterly*, 129: 814-826; Gutek, B. A. & Morasch, B., 1982. "Sex-Ratios, Sex-Role Spillover, and Sexual Harassment of Women at Work," *Journal of Social Issues* 38: 55-74; Hulin, C. L., Fitzgerald, L. F. & F. Drasgow, 1996. "Organizational Influences on Sexual Harassment," Pp. 127 – 150 in M.S. Stockdale (ed.) *Sexual Harassment in the Workplace; Perspectives, Frontiers, and Response Strategies*. Thousand Oaks, CA: Sage; Rosen, L.N. and M. Lee, 1998, "Sexual Harassment, Cohesion, and Combat Readiness in U.S. Army Support Units." *Armed Forces & Society* 24(2): 221-244; Rowe, M. P. 1996. "Dealing with Harassment: A Systems Approach," Pp. 241-271 in M.S. Stockdale (ed.) *Sexual Harassment in the Workplace; Perspectives, Frontiers, and Response Strategies*. Thousand Oaks, CA: Sage

<sup>19</sup> Rowe, 1996: 270, Colvin, Roddrick A. and Riccucci, Norma M. 2002. "Employment Nondiscrimination Policies: Assessing Implementation and Measuring Effectiveness," International Journal of Public Administration 25(1): 95-108.

<sup>20</sup> In the case of an off the record appeal, a designated ombuds representative could have an informal discussion with the harasser, or suggest a departmental training program for all employees.

<sup>21</sup> Gruber, J. E. 1998. "The Impact of Work Environments and Organizational Policies on Women's Experiences of Sexual Harassment," *Sex Roles* 12(3): 301-320.

---

<sup>22</sup> Lavite, C. & Stoller, L. 1993. "A Social Psychological Analysis of Sexual Harassment: The Person/Situation Interaction," *Journal of Vocational Behavior*, 42:68-81.

<sup>23</sup> Bingham, S. G. & Scherer, L. L., 1993. "Factors Associated with Responses to Sexual Harassment and Satisfaction with Outcome," *Sex Roles*, 29: 239-269; Firestone, J.M. and Harris, R.J. (1997). "Organizational Climate, Leadership and Individual Responses to Sexual Harassment in the Active Duty Military." *Free Inquiry in Creative Sociology*, Vol. 25(2): 1-7; Grauerholz, E., 1989. "Sexual Harassment of Women Professors by Students: Exploring the Dynamics of Power, Authority, and Gender in a University Setting," *Sex Roles*, 21: 789-801; Livingston, J. A., 1982. "Responses to Sexual Harassment on the Job: Legal, Organizational, and Individual Actions," *Journal of Social Issues*, 38: 5-22; Maypole, D. E., 1986. "Sexual Harassment of Social Workers at Work: Injustice Within?" *Social Work* 31: 29-34; U.S. Merit Systems Protection Board, 1994. Sexual Harassment in the Federal Workplace. Washington, D.C.: Office of Merit Systems Review and Studies.

<sup>24</sup> Bingham & Scherer, 1993; Grauerholz, 1989; Gruber & Bjorn, 1986; Harris & Firestone, 1997; Loy, P. H. & Stewart, L. P., 1984. "The Extent and Effects of the Sexual Harassment of Working Women," *Sociological Focus*, 17: 31-43; U.S. Merit System Protection Board, 1994.

<sup>25</sup> Hulin, et al., 1996; Rowe, 1996; Tangri, S. S., Burt, M. R., & Johnson, L. B., 1982. "Sexual Harassment at Work: Three Explanatory Models," Journal of Social Issues, 38: 33-54.

<sup>26</sup> Rowe, 1996; Staples, R. 1994. "Anita Hill, Sexual Harassment, and Gender Politics in the Black Community," in R. Staples (ed.) *The Black Family; Essays and Studies*. Belmont, CA: Wadsworth; Zimmerman, J., 1995. *Tail Spin; Women at War in the Wake of Tailhook*. New York: Doubleday.

<sup>27</sup> Cohen, William S. 2001. *Annual Report to the President and Congress, Office of the Secretary of Defense*. U.S. Department of Defense, May 31, 1999, Defense Manpower Data Center.

<sup>28</sup> Brown, Rupert, 1988. *Group Processes: Dynamics Within and Between Groups*, Cambridge, MA: Blackwell Publishers.

<sup>29</sup> Bowling, Kirby, Firestone, Juanita M. and Harris, Richard J. 2005. "Analyzing Questions that cannot be Asked of Respondents Who Cannot Respond," *Armed Forces & Society*, 31 (4): forthcoming.

<sup>30</sup> Bowling, Firestone & Harris, 2005.